

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



THE NATIONAL NURSEYMAN



JANUARY 1919

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa

Our Specialty

A large assortment of high quality Nursery
Stock for the Wholesale Trade.

Fruit Trees, Small Fruits, Ornamental Trees,
Shrubs, Roses, and Vines.

A FINE LOT OF

Elm, American White, all sizes

Wanted — Hansen Hybrid Plums and Compass

Ask for Trade Lists. Write us about your wants.

Subscribers to "Nurserymen's Fund for Market Development."

*Progressive, Superb
and Peerless
...Everbearing...
Strawberry Plants*

We can supply you fresh dug every
day. Healthy true-to-name, well root-
ed at attractive prices.

Address

The W. F. Allen Company
Salisbury, Maryland

January Bulletin

out about the 15th, with full line of stock, all in
storage for early Spring shipment. Fruit stock
is going to be scarce as well as Roses and Orna-
mentals. It will pay you, Mr. Buyer, to book
early and have your stock shipped so you can
have it on your grounds for use when you
want it.

C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

We Are Proud and Glad

The
Preferred
Stock

of the fact that we have a score or more of men in our employ who have worked for us from ten to thirty-five years. Our farm foreman, our greenhouse foreman and our general superintendent, all middle-aged men, have **grown up with us** and have **never worked anywhere else**. In these days when so many workmen are of the "floater" type it is most helpful and comforting to have trained, efficient employees who know just what to do and how and when to do it. We give credit in no small measure to their loyalty and efficiency for the success and continuous growth of our business. It enables us to give the right kind of service in growing, grading, packing and shipping,—the kind of service which pleases and holds our customers and brings us additional ones.

When you are "in a tight pinch" for something which you want **quickly and just right**, write or wire us. We will "be there with the goods."

Write us about—

Roses,

Flowering Shrubs

Clematis *Paniculata*

Clematis, large-flowering

Tree-Form Lilacs

Perennials

Paeonies

Ampelopsis Veitchii

Shade Trees

Fruit Trees

We can generally furnish, or tell you where to get, those **scarce, hard-to-find articles**. Did you receive our Bulletin No. 1? If you did not please write us. We shall be issuing another one early in January and,—if you are in the trade,—we want to have your name on our mailing list.

JACKSON & PERKINS CO.,

Newark, New York

The
Preferred
Stock

Subscribers to Nurserymen's Fund for Market Development

The
Preferred
Stock

A Word from Holland To American Importers

Recent cable advices from our home office at Boskoop informs us that the folks at home are ready to accept orders for Holland-grown nursery stock, and anticipate no difficulty in shipping during the coming spring.

We can furnish reasonable quantities of Rhododendrons, Buxus, Retinospora, Juniperus, Thuya, Spruces, Japanese Maples, Clematis and Dutchman's Pipe; in fact, we will be able to supply nearly all of Holland's Specialties.

We have not lacked for labor in our nurseries, therefore the stock has been properly cultivated and kept in the very best condition and your orders will be filled from this superb stock. Send us your want-list for quotations.

Our wholesale catalogue is now in process; a copy will be mailed on request.

All communications should be addressed to our New York office.

F. J. Grootendorst & Sons
(of Boskoop, Holland)

10 Broadway, Room 1101 - New York City

"100%"

100% of our business is Wholesale—To The Trade.

100% of our Advertising Matter is sent to Nurserymen.

100% of our Customers are Nurserymen—the logical distributors of Nursery Stock—the only proper recipients of Trade Prices.

100% of our Stock is grown by us, here, at Princeton.

100% of Attention is given these Trade orders; 100% of the trees and plants we ship must be **usable** by those who buy them.

100% of Service goes into Grading and Packing and Shipping Promptly.

100% of Value is put into the Prices.

100% of Satisfaction comes to the Nurserymen who buy Princeton Products; ask them.

What per cent of **your** spring order, Sir, will be placed with us or some other nursery giving you the same combination of goods and service and value?

An order, mind you, is more than a purchase; it endorses and supports the **policy** back of the firm that sells you. It is proper for you to satisfy yourself that the policy helps rather than hinders **your** business.

We and many other firms are glad to meet that test.

PRINCETON NURSERIES
PRINCETON, - NEW JERSEY
January first.

PAINESVILLE NURSERIES



Before the Leaves Appear



The Buying Public,—from Missouri, Maine, Michigan, et al.,—usually wait to be shown.

The Buying Nurseryman, however, must have imagination. It is up to him to visualize along bare twigs and bleak branches, the alluring beauties of leaf and blossom which enthuse the B. P. later. So, he stocks up; passes on his vision to prospective customers; and is ready when they ask for—"Flowering Almonds," for instance.



The S. & H. Co.

Extends to The Trade
best wishes for

A Happy and Prosperous New Year!



When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants
MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

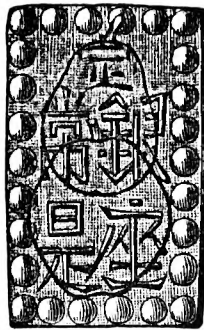
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

**FRUIT TREES
ROSES and other
ORNAMENTALS**

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES

HUNTSVILLE, ALA.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

70 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

For Spring 1919

Our largest surplus consists of the following:

Montmorency, Richmond & Dye House $\frac{3}{4}$ in. up
Apple - - - - 3 and 4 years

Ben Davis	Dr. Matthews
Benoni	Gano
Banana	McIntosh
Canada Red	Maiden Blush
Carson, (red, earlier than Yell. Trans.)	Stark
Ragans Red, (Black Ben Davis)	Wagoner

Plums - - - - 11-16 and 5-8 in.
Lombard, Bradshaw, Shropshire.

Norway Maple, (20,000) - - up to 2 in.
These maples are straight and fine stock.

American Elm, (25,000) - - up to 2½ in.

Spirea Van Houtti, 3 to 4, 4 to 5, 5 to 6 ft. bushy

Also a general assortment of small fruits,
shade and ornamental trees and plants.

C. M. Hobbs & Sons

Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

1918 Peach Seed

We offer a surplus of
100 bushels of North Carolina Peach Pits
Crop 1918

At \$3.00 per 50 pounds
F. O. B. here

H. F. Hillenmeyer & Son

LEXINGTON, KY.

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

I have sold all the stock I will have this Spring, but this Summer I will be ready to book orders for Fall, 1919 and Spring 1920 delivery.

The war is over and good times are ahead. No more guns or ammunition will be needed, but you will want more of my Grape Vines, Scarlet and Crimson clover and Cow-Peas than ever before.

Keep me in mind.

CHAS. M. PETERS

P. O. Address Salisbury, Wicomico County, Maryland.
Long Distance 'Phone and telegraph, Salisbury, Maryland.

We are now ready to quote lowest prices on
**FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.
Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries

Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

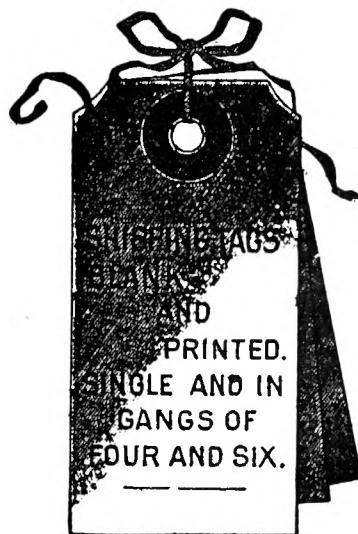
The Roessler & Hasslacher Chemical Co.
100 William St. - - - New York, N. Y.

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

**Rawhide Brand of Shipping
Tags and Tree Labels**

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

P. OUWERKERK,

No. 216 Jane St., Weehawken Heights, Hoboken, N. J.
Rhododendrons, Clematis, H. P. Roses, Hardy Azaleas,
Paeonies, Magnolias, Box Trees, Fancy Conifers, Hydran-
geas and Shrubs, our specialties at our HOLLAND NUR-
SERIES. Some of the goods on hand here during the
packing season.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobolan Plum and
Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a
large assortment. My Catalogue contains complete list with
Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades, also
Grape and Currant Cuttings and Light Grade of Vines for
Lining Out in Nursery Rows
WRITE FOR PRICES

F. E. Schifferli, - Fredonia, N. Y.

HARDY PERENNIAL PLANTS

Phlox, Iris, Delphiniums, Shasta Daisies and many other
perennials. Send us your want list for prices or ask us for
wholesale price-list.

WILLIAM TOOLE & SON,
Hardy Plant & Pansy Farm,

Baraboo

Wisconsin

EVANSVILLE NURSERIES, EVANSVILLE, INDIANA

Especially high grade stock now ready, 150,000 Cal. Privet,
2 years old cut back, 2-3 ft. with 5 to 10 branches, 3-4 and 4-5
ft. with 8 to 15 branches, exceptionally well rooted, and best
quality ever shown. Must be seen to be appreciated.

Budded roses, 2 year exceptionally strong. Hardy per-
petuals, and Hybrid tea, and teas.
Spanish Chestnut 18 to 24 in. Fine line of shrubs.

We invite correspondence.

CHERRY TREES

We offer, two and three year cherry, also some nice
2 year climbing roses, on own roots. All select stock.
Write for prices in car lots.

MILTON NURSERY COMPANY,

Milton

Oregon

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing
Ask for Prices. We are the printers of this Magazine

To the Nurseryman:

I will get many good Landscape photographs the coming
spring; will you have me index your name for copies of
these?

I have good views on hand now that you might want for
your next spring's selling.

I make enlarged pictures from your kodak films reason-
able. Write me.

B. F. CONIGISKY, 416 N. Jeff. St., Peoria, Ill.

HARDWOOD CUTTINGS PRIVET ALL KINDS

We make a specialty of the above and can give you extra
good service. Write us.

OAKLAWN NURSERY,

Huntsville

Ala.

STRAWBERRY PLANTS

Summer and Fall bearing varieties, shipped to you or
direct to your customer under your tag.

Plants and service that pleases both you and your trade.

Let us quote you

V. R. ALLEN,

59 Lane Avenue

Seaford, Del.

SHADE TREES

We have a fine lot of Ash, Elm, Box Elder, Maple, Catalpa
and HACKBERRY. Let us quote you prices on your wants.
Can furnish them in carload lots.

GURNEY SEED & NURSERY COMPANY,
Yankton, South Dakota.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

10,000 Monacacy Apple, 2 yr., Buds.
250,000 Cal. Privets, 2 yr. and 3 yr.
500,000 Asparagus Asst., 2 and 3 yr.
Barberry Thun., 3 yr., extra fine.
Lombardy Poplars, 8 to 16 feet.
Oriental Planes, 8 to 16 feet.
Tulip Poplars, 6 to 12 feet.
Horse Chestnuts, 8 to 12 feet.
Catalpa Speciosa, 8 to 12 feet.
Can supply the above in CAR lots.

We also offer in large lots, Rhubarb, Cumb. Raspberry,
Ruby, Miller, and St. Riggs Raspberry Altheas, 3 to 5 feet,
Deutzias, and Spireas Asst., Hydrangeas P. G. Etc. Will
make low prices for early orders.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring
orders or if you wish to increase your planting in nurseries,
we can supply you with genuine PROGRESSIVE Everbearing
plants, guaranteed to be TRUE TO NAME and handled so as
to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing straw-
berries for the past eight years and have many new varieties
growing in our experimental grounds that are not yet for sale.
We invite a personal visit to our grounds during fruiting sea-
son, preferably during August or September. The latch string
is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

ROSE STOCK

Be independent grow your own ROSE STOCKS for budding or grafting. Those using ROSA MULTIFLORA JAPONICA STOCK prefer it to Manetti. We offer for immediate delivery New Crop unhulled Seed.

Write for prices.

95 Chambers St.

McHUTCHISON & COMPANY

New York, N. Y.

Ornamental Nursery Stock

TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS PLANTS

Large assortment. Long list of varieties and sizes
Get our New Trade Catalogue,—ready in January.

Fall price list out of date.

Thomas B. Meehan Co.
WHOLESALE NURSEYMEN,

DRESHER

PA.

HORTICULTURE

A Magazine of Trade News and Cultural Information
for the NURSEYMAN, FLORIST, SEEDSMAN and
GARDENER. A reliable exponent of advanced Trade
and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

HORTICULTURE PUBLISHING CO.

147 Summer St.

Boston, Mass.

We have more of the following fruit trees
than we will need for our retail trade the coming
spring. If interested, please write for prices
and a copy of our Surplus List:

APPLES

Alb. Pippin
Alexander
Baldwin
Bellefleur
Ben Davis
Car. Red June
Cornell's Fancy
Dela. Winter
Dickinson
Dominie
Duchess of Old.
Ey. Colton
Ey. Harvest
Ey. Ripe
Ey. Strawberry
Fallwater
Fall Pippin
Gano
Golden Sweet
Greenville
Grimes Golden
Hub. Nonsuch
Jefferis
Jonathan
King
Lady
McIntosh Red
No. Spy

Nyack Pippin
Ohio Nonpareil
Paragon (or Mam. Black
Twig)
Pawaukee
Rambo
Red Astrachan
Red Beitigheimer
R. I. Greening
Roman Stem
Rome Beauty
Smith's Cider
Spitzenburg
Stark
Starr
Strode's Bghm.
Summer Pearmain
Summer Rambo
Sutton's Beauty
Townsend
Twenty Ounce
Wagoner
White Ohio Pippin
Winter Banana
W. S. Paradise
Wolf River
York Imperial

PEARS

Bartlett
Beurre Clairgeau
Beurre d'Anjou
Belle Lucrative
Butter
Clapp's Fav.
Doyenne d'Ete
Duchess d'Ang.
Howell

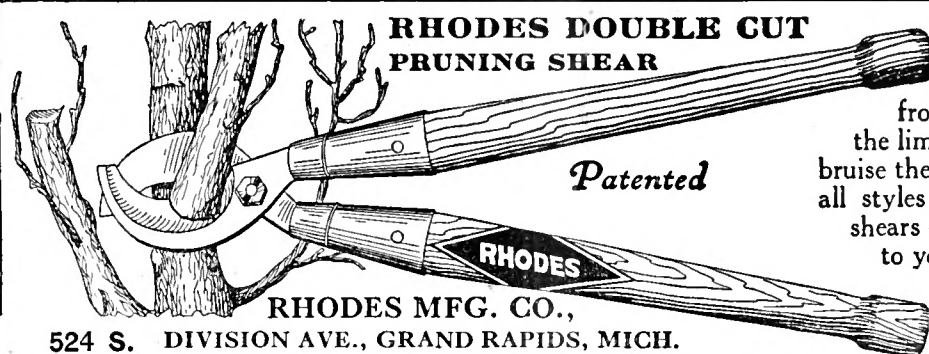
Idaho
Keiffer
L. B. de Jersey
Manning's Eliz.
Osband's Summer
Roosevelt
Rossney
Sheldon
Dana's Hovey

1000 Houghton Gooseberries, No. 1
3000 Downing Gooseberries, No. 1

HOOPES, BROS. & THOMAS COMPANY

The West Chester Nurseries

West Chester, Pa.



**RHODES DOUBLE CUT
PRUNING SHEAR**

Patented

RHODES MFG. CO.,
524 S. DIVISION AVE., GRAND RAPIDS, MICH.

THE only
pruner
made that cuts
from both sides of
the limb and does not
bruise the bark. Made in
all styles and sizes. All
shears delivered free
to your door.
Write for
circular and
prices.

ESTABLISHED 1893

THE NATIONAL NURSEYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.
Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence
pertaining to the Editorial Department, should be addressed.
Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading
nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock
offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance.

FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSEYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

J. H. Skinner & Co.

Topeka, - Kansas



Japan Pear Seedlings.

Russian Apricot Seedlings.

Forest Tree Seedlings—Catalpa, Maple, and Locust.

Fruit Trees—Apple, Cherry, Kieffer Pear, Peach and Plum.

Rhubarb, Divided Roots, True Myatt's Linneaus.

Grapes

Shade Trees

Flowering Shrubs

Paeonias

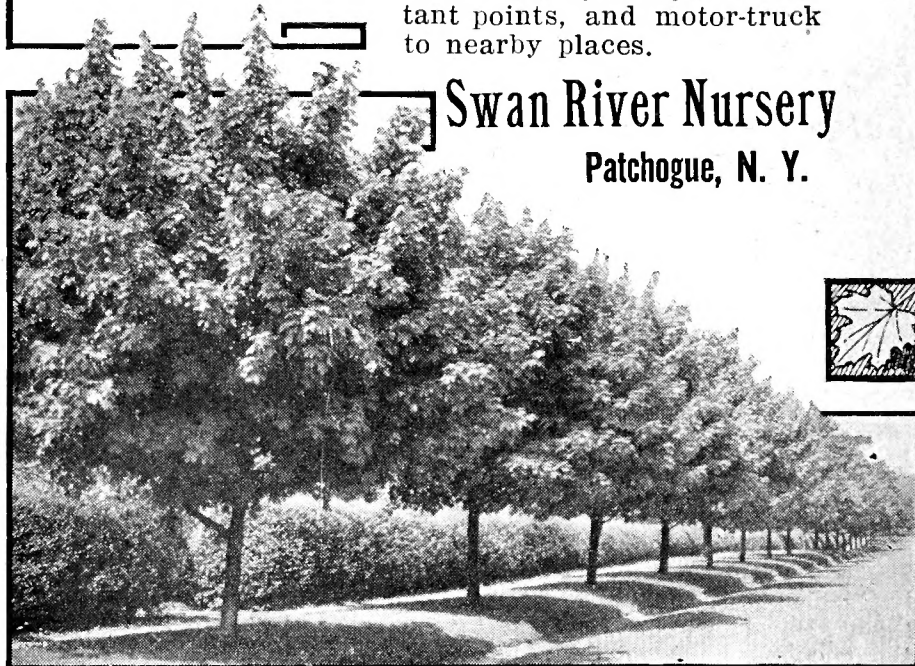
It's A Happy Day

for you and your customer when you fill orders for Norway Maples with the trees we offer. You will like these trees because they are grown right; your customers will like them because the trunks are straight, the tops well rounded, the roots fully developed.

Tell us how many trees you can use; we will quote a price that will interest you.

We ship by freight to distant points, and motor-truck to nearby places.

Swan River Nursery
Patchogue, N. Y.



Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

We are pleased to offer for Spring or Fall:

CHERRY, 2 year X X 1 inch up, also $\frac{3}{4}$, $\frac{5}{8}$ and lighter grades.

CHERRY, One year $1\frac{1}{16}$ up, $\frac{5}{8}$ & $\frac{1}{2}$ to $\frac{5}{8}$

Our Blocks of Cherry are largest to be found in U. S. We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment.

Grafted Hardy Northern Pecans.

Car Lots a specialty, also fair assortment of Ornamentals.

Subscribers to "Nurserymen's Fund for Market Development."

You can save Time and Money

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street

Rochester, - - New York

Hill's Evergreens

We are headquarters for Everything in the Evergreen line, and with few exceptions have our usual full supply, but some things are scarce and getting scarcer every day. Owing to lack of imports, demand is brisk, and shrewd Nurserymen are covering their requirements early.

Nurserymen—Send us your list of wants in young Evergreens for lining out. Also Deciduous Trees, Shrubs and Vines. Our Propagation Department is one of the largest and most complete in America, and feel sure we can save you money and give complete satisfaction.

Dealers—Let us take care of your wants in Windbreak, Hedge and Ornamental Evergreens. Send in your list for pricing now, while assortment is complete.



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERYSTOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVII.

HATBORO, PENNA. JANUARY, 1919

No. 1

WHITE PINE



There would be very little beauty in this view if it was not for the White Pines and the Euonymus radicans in the foreground.

A BALLOT to decide the handsomest evergreen tree growing in the United States would give many votes in favor of the White Pine, *Pinus strobus*.

It is handsome and symmetrical when young and picturesque when old.

Our illustration shows a winter scene, the beauty of which is mainly due to the group of these old pines, near the house.

A good landscape effect does not depend on either a

great variety or quantity of plants, but rather the right plant in the right place. The landscape gardener is as often to blame as the nurseryman for overcrowding and the customer as often as both, due to their desire to have an immediate effect.

The dreary landscape effects can easily be avoided by the proper use of the right kind of evergreens without detracting from the summer beauty.

Without the White Pines and *Euonymus radicans* in

the picture, the view would hardly be one worth the attention of the photographer from an artistic point of view, especially in the winter months.

It is unfortunate the White Pine, that used to form such a large proportion of the trees of American forests, is losing its resistant powers since the settling up of the country. In many localities where it once was a common forest tree it is now somewhat difficult to grow on account of disease.

However, it can hardly be dispensed with as an ornamental plant, as there is no pine that will take its place, so even if it does require a little special attention in the way of spraying, it is well worth while.

The evergreen in the foreground of the picture is the *Euonymus radicans*. This plant is generally classed as a vine, but give it a post or something to support it out in the open it develops a very bush like form.

MEMORIAL TREES

The Garden Nurseries,
Narberth, Penna.

In order to foster a love for shade trees it behooves the nurserymen of the country to take a leading interest in the planting of shade trees to commemorate the Great War; we owe this to posterity, to the men engaged in the bloody conflict, to the present generation and to ourselves.

Several communities have made an effort along this line. Morrisville, Pa., a town in North Jersey, and Narberth, Pa., were the first in the field. In Narberth a tree is to be planted for every enlisted man in any and all the branches of the service. A start was made for Narberth in October when trees were planted for each branch of the service: Army, Navy and Marines; also two trees were planted for two who had made the supreme sacrifice these latter two were dedicated with the ceremony used by the A. Ex. Forces when placing the body to rest in the soil of France. A salute of musketry, taps and prayer.

A throng of people were present and the movement launched an assured success.

A few days ago a letter arrived in Narberth from Private Alfred L. Cutts, Co. A., 314th Inf., A. E. F., on active service in France.

. Narberth must be getting to be quite a place when the London Newspapers mention it. Was looking a "Daily Mail" over the other day and up near the head of the paper was a piece about Narberth and Narbrook Park, it almost took my breath away. . . . It went on to say that Narberth had started planting trees for the men who had left town to defend their country in France and that three had been planted as a starter with a big celebration attended by hundreds of people, Narberth claiming to be the third if not the first place to adopt this idea. Is a tree planted for me too, or is it only for those that are laid to rest here?

You see that our defenders are taking an interest in

the matter and it is surely up to us to carry on planting our growing monuments for our boys, thereby possibly preventing the perpetration of those horrors in stone that can now be seen in every county seat in Pennsylvania, a stiff little wooden soldier on a pinnae.

I feel that this planting must be a great boon to the community, providing much needed shade and awakening an interest in nature generally and trees in particular.

Under the laws of Pennsylvania, Boroughs may appoint a shade tree commission with power to plant trees along the public highways and streets. Narberth has such a committee now, just appointed; a local nurseryman being the chairman, why not set the wheels in motion, get your burgess or mayor to introduce the motion to council or have one of your friends in Council do so, thereby doing something substantial for your community and a positive benefit to your fellow nurserymen.

A. E. WOHLERT.

CHRISTMAS GREENS

Suggestions that tend to curtail the customs or joys of Christmas are not likely to be well received but all those interested in our native flora cannot help but look with regret on the increasing use of holly and mountain laurel for decorative purposes at Christmas time.

If these plants were of the fast growing type so that the recovery of the native growth somewhere near kept pace with their destruction there would not be much cause for alarm.

Both the holly and mountain laurel are very localized in their habitat and every year sees them rapidly diminishing from localities that are easily accessible.

There are so few evergreen native shrubs that they cannot be destroyed without sacrificing much native beauty that cannot be replaced.

It always has been a common fault in America to be lavish with our natural resources, regardless of the future.

If the powers that be only had foresight enough to preserve more of these natural beauties from destruction even for so worthy a cause as Christmas decoration, the worthy cause would not suffer, for substitutes would soon be found.

Nurserymen could grow evergreens for the purpose such as Arbor Vitae, Box, Euonymus, etc.

Then there is the pine and juniper that make very attractive decorations and are not likely to be exterminated however much they may be used as their growth is so rapid.

Stop the foragers that destroy property, that is a common heritage of the people, for a few dollars and the evil would be corrected and Christmas green market would soon adjust itself to interior decorations that were not procured at such a sacrifice of beauty to the outdoors.

Pertaining to Petaluma

The very latest National Publicity Campaign is one to sell more—you'd never guess what—well, eggs, of all things. Petaluma, California, grows or produces,—or whatever the right word is,—more eggs than any other place in the world. And the Chamber of Commerce there are going to spend \$50,000 to advance the interests of the egg industry. Here is something to think about. Can we not derive some profit from a serious consideration of the situation, the action and the probable results? Here—or there, rather—is a town that proposes to spend quite a bunch of money to advertise eggs. Of course, Petaluma's eggs—or Petaluma's hens' eggs, I should say to be exact—are the particular eggs that they are interested in. But eggs are universal. Will there not be danger of some other eggs somewhere else getting some of the benefit from that advertising? Just consider a minute: The American hen, next to the American Eagle, is our most peculiarly American institution; she is not local nor sectional; she is truly National. In every state and in every part of every state,—at every home that is a home,—in every barn-yard and in most front-yards, (when you're not watching mighty carefully), the universal hen will be found, industriously digging up the tulip-beds. Still, she is the greatest wealth-producer in our entire population; the biggest dividend-payer on invested capital. And she believes in publicity; she produces a good thing—and tells about it. None of Emerson's mouse-trap stuff for her! She is the best advertiser that I know of; she advertises regularly and persistently; she believes in her line and her copy and she sticks to her story. She advertises fresh eggs—and delivers the goods. She is one advertiser that is always believed. No Federal Trade Commission order will ever direct her to "cease and desist." She is honest; she never misrepresents; when she tells you about that egg, you know it's there.

The only weak point in her advertising, as I critically view it, is this: that it is too purely local; it is confined to the "home paper," so to speak;—the copy never gets farther than the barn-yard fence. But the story must go farther than that; so must the eggs. If not, what could Old Speck do with them?—"keep them and sit on them?"

Right at this point is where the Chamber of Commerce, of Petaluma, California, come in. They are going to spend \$50,000 to put the story of eggs across the map! That is not alone because of a very commendable local pride in the products of Petaluma's White Leghorns. The Chamber of Commerce themselves admit that their action is based in part upon conditions arising out of the Great World War; it is a part of the "re-adjustment;"

it is a matter of finance and economies and that sort of thing.

Thousands—even millions—of eggs that were drafted in former times to the purposes of egg-nog and Tom-and-Jerry, are now released to other and soberer uses.

I can state—on information and belief alone, however,—that right in my home town eggs today cost nine cents apiece—each one! I confess I see no immediate cause for alarm in Petaluma—nothing that would seem to cry for an increased demand with the inevitably higher price, when an omelette aux champignons is already as far beyond reach—although for a different reason—as the historic egg-nog and the Tom-and-Jerry of the days that are gone.

But what I especially object to, firmly and strenuously, is the demand of Petaluma that Food Administrator Hoover declare and set apart a National Egg Day. I trust that the flabby and spineless Administration at Washington will not add to its blunders by weakly yielding to that appeal. We have too many "Days" now; there's Mother's Day and Father's Day and rent day and then moving day and Thanksgiving day (without the turkey) and Christmas Day (without the egg-nog that erstwhile marked the joyous Yuletide); and I want to protest right here and now against setting up a National Egg Day, even with eggs—unless suitably embellished, of course. As a People, we are patriotic, or even more so, especially those of us who stayed at home to farm, those two rows of potatoes to help feed Europe's starving millions; and we have sent our friends and our relatives and our wives' kin-folks and, we hope, our creditors to the firing-line. We have laid upon the Altar of Liberty, our Bonds and our W. S. S., and our contributions to the Y. M. C. A., and the U. W. W., and the rest of the alphabet; and now, having won the war, should we—I ask you candidly,—should we be asked to make further sacrifices for a National Egg Day and to place our remaining small change on the Altar of the Petaluma Hen?

THE OPTIMIST.

Berlin, Md., December 14, 1918.

Mr. Ernest Hemming, Editor,
National Nurseryman,
Flourtown, Pa.

Dear Sir:—

We must compliment you upon the fine photograph of the Mistletoe which you published in your December issue. The photograph shows the typical natural habitat of the Mistletoe. Mistletoe grows abundantly in the woods about Berlin.

Very truly yours,

HARRISON NURSERIES,
W. HALE HARRISON.

A French Nurseryman's Opinion on the Plant Embargo

The following letter was received by the "National Nurseryman" in response to a letter soliciting the renewal of an advertisement. It throws light on the opinion that foreign nurserymen have in regard to the embargo and points out to a certain extent, the injustice and complications that may arise.

16 Route d'Olivet,
Orleans, France, November 28, 1918.

Dear Sirs:

In answer to your favour of the 5th inst. we regret to inform that we shall not renew our advertisement this season. We had a very limited quantity of ornamental stocks this year, and most of the sorts will soon be exhausted.

We take this opportunity and inform you that we are very much afraid of the intention of the Federal Horticultural Board to prohibit from June 1st, 1919, all importations of ornamental stock.

We must say that a certain number of French firms, grow yearly, considerable quantities of young ornamental trees and shrubs, specially required by the American trade. Although they did not have many men employed this year, they made great efforts to increase their cultures of these plants, in anticipation of the demand they expected after the war. Must this work be all loss? Must they be compelled to destroy all these plants?

Is it really a danger for America to import plants from foreign countries? We clearly understand that imported stocks must be very carefully inspected, and infested stocks destroyed, but our opinion is that the Federal Horticultural Board officers exaggerate the situation. We may add that a great number of insects or pests causing damage in Europe were first imported from America.

There may be exporters who do not sufficiently control their cultures and do not attempt to get rid of pests affecting their plants. These careless growers, if any, ought not to be allowed to export. The inspectors of each exporting country ought to be more severe and refuse certificates to such firms. If one or two firms had to bear a penalty, whatever it is, it is certain other exporters would become more careful, and careful exporters would thus not be compelled to suffer through the carelessness of others.

In our district the Inspectors of the Service Phytopathologique are very attentive, when an insect or pest, even

if it has no dangerous effect on plants or trees, is found, they require the grower to have the plants destroyed at once, and give them the best remedy for preventing the return of these insects or pests. Their instructions are always followed by responsible firms.

Before the plants are packed the Inspectors arrive unexpectedly in the packing sheds, control all plants and compel the exporter to take from the orders the stocks on which they have a doubt. We believe that a better inspection cannot be made.

We are glad to say personally that none of our plants have caused us any difficulty either with the French inspectors nor with the American inspectors. Only one exception. Two years ago we sent a lot of *Syringa persica* to a customer and when inspecting them on arrival the American inspector said they were infested with crown gall. These plants were grafted on the California privet, as these plants do not unite very well, a large swelling was formed at the union of the grafts of some plants, as often happens. Our plants were destroyed, we deducted their amount from our customers account, and never protested against this error of an over zealous inspector.

We do not understand the reason why the Federal Horticultural Board allow the importation of the fruit tree stocks and prohibit the ornamentals. These fruit tree stocks, however, can carry all the same sorts of insects or pests, perhaps still more, than Spiraeas, Philadelphus, Buddleia and many other plants on which insects or pests are rarely to be found.

We further notice that seeds of fruit trees, shrubs, etc., are allowed to be imported. Does not the Federal Horticultural Board fear that, at the demand of interested exporters of plants, the exportations of seeds from France or allied countries could be prohibited as a repressive action. We have heard several of our colleagues speaking about such a decision. If this became of final decision, America could import neither plants nor seeds. We should be very sorry if our government took such a decision that would affect the trade of a country who so generously spent their men and so much money in order to help our unfortunate France. We do not believe it will happen.

On your side, could you not let the Federal Horticultural Board know what a loss their prohibition will cause to France, who has already so much suffered by its loss of men and money?

We must add that, if the prohibition is decided upon, it would be considered as a penalty imposed on France and allied countries, although we feel sure it is not the intention of the Federal Horticultural Board.

We hope that after careful examination of the situation the United States Government will not cause the

ruin of our industry that has rendered, for so many years, considerable service to the American nurserymen and allowed them to beautify their generous country.

Please excuse this long letter that you may publish or any part of it, if you find it interesting to do so.

Yours very sincerely,

BARBIER & Co.

RAFFIA

E. E. Pescott, F. L. S., writing in the Australian International Nurseryman on the source of raffia used by nurserymen for tying purposes says—The palm *Raphis Raffia* from which the raffia is procured are really magnificent and gigantic. The leaves, not unlike those of the Phoenix species, are usually sixty feet in length and thirty to forty feet in width, so that it is truly a regal palm.

In their native tropical habitat, Madagascar, where the palms grow in great profusion, they become economically useful from their seventh year. The palms grow for twenty years or thereabouts, then they flower and seed, and shortly after die.

The textile fibrous material, known as raffia, is taken from the central shoot, being cut with a strong sharp instrument.

The sheath surrounding and protecting the young growing leaves, and portions of the leaves themselves, are the source of the raffia. These, after being cut off, are rapidly divided by hand, are dried, and then worked up into plaits for export.

It is generally known that raffia has become of great value at the "front," being used extensively for camouflage purposes. The ease with which it may be worked, fastened or woven, the relative lightness of the material, causing it to wave and move readily in the wind, the quickness with which it takes dye, and many other attributes all give an importance and value to raffia for camouflage and secrete purposes. Thus a road or gun position may be quickly hidden from balloon or aeroplane observers by huge streamers constructed with multi-colored raffia, and so protection is given to such positions. The army authorities of America, Britain and France have so recognized its value that they have requisitioned large supplies from all sources.

The one possible impracticable feature in regard to raffia production in Australia, is that the palms must be from five to seven years old before they become commercially productive. But even so, the palms might be introduced into Australia or to some of the Pacific Islands with a view to testing their commercial value.

MARKET DEVELOPMENT

During the war, the many difficulties with which every nurseryman had to contend in the way of labor and transportation and the public's absorption in other things than nursery stock made it impossible to proceed with market development work. That it would have been better to launch the campaign months ago, is obvious. It was not, however, so much a question of what ought to be done, as what could be done.

Like many other enterprises it had to wait until the war was won before real action could be taken.

Now the war is ended the Executive Committee lost no time in getting into action.

The sub-committee consisting of Mr. John Watson and Mr. Robert Pyle was appointed to find a man to handle the work of the organization.

After considering several men all of whom had exceptional qualifications they finally decided upon Mr. F. F. Rockwell.

He has been engaged to handle the work under a tentative arrangement approved by the Executive Committee and subject, of course, to the action of the subscribers themselves.

Mr. Rockwell is well known in the horticultural world. He is the author of seven or eight books on gardening subjects and those connected with our trade; he has been a regular contributor to farm and garden papers, was circulation manager of the Garden Magazine; upon his own initiative he established demonstration vegetable gardens in half a dozen cities, and during the past year was manager of the 750 acre seed farm of W. Atlee Burpee Co., Doylestown, Pa.

Mr. Rockwell is to give half his time, the rest being given to the work of the Farm Bureau where he has his office in the Sun Building at 150 Nassau Street, New York.

He is right on the job, his first step will be to send a report and statement to all the subscribers with an outline of what he proposes to do.

As the advertising men say, now is the psychological time, with the end of the war and in the manner of its ending, there has come over all our people a new spirit and a determination to resume as quickly as possible our normal pursuits.

Nurserymen share that feeling and it will be gratifying to all to know that at last a start has been made in an attempt to put the nursery business where it belongs, among the leading industries of the country.

WANTED A SLOGAN

Now the Market Development movement is under way, a good catchy slogan must be adopted.

In a spirit of banter we suggested "Do it by Planting" as a travesty on the one adopted by the florists, "Say it with Flowers."

We invite suggestions from the readers of the National Nurseryman.

A slogan that will fit the situation and have the punch.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by
THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., January 1919

Subscribers to "Nurserymen's Fund for Market Development"

A Happy New Year

*In no other occupation can men and women more
surely find happiness and inspiration after the work
of the day, than among nature's own bounties, shap-
ing them into lawn, garden, orchard, bed and bor-
der, until their souls are satisfied with the loveliest
there is in nature.*

*It is the nurseryman's privilege to foster the de-
sire and supply the gems that will bring peace and
happiness into everyone's life.*

*There can be no better wish for the New Year
that the nurseryman be awakened to the full re-
sponsibility of his honored calling.*

THE FOREIGN PLANT EMBARGO

It is to be hoped the members of
the Federal Horticultural Board
will breathe easier and will be
well repaid by that feeling of a
duty well done, now their drastic proposition for the ex-
clusion of plants has been approved by the Department of
Agriculture.

The fact that they have damaged an American key

industry to the tune of many millions of dollars need not
concern them, or that they put a large obstacle in the
way of those foolish people who would like to make their
home surroundings more beautiful.

One of the specific duties of the Federal Horticultural
Board is to guard the flora of the United States from in-
sect pests and disease that might be imported from for-
eign countries. The Board has come to the conclusion
that the only way to do this was, not by insuring only
clean stock should be imported and by efficient inspec-
tion, but by prohibition, thus admitting it had no faith
in the efforts or ability of foreign growers to only ship
clean stock, or in the knowledge and ability of the path-
ological service of foreign countries such as France, Hol-
land, England and Belgium and still less in the ability of
our own State Inspectors.

Even with all the authority of the United States De-
partment of Agriculture to enforce its rulings, and with
all the science, economic entomologists and inspectors
at its command, the Federal Horticultural Board had to
acknowledge it was incompetent to prevent the introduc-
tion of pests on nursery stock except by prohibition or in
other words, it has decided to kill the dog to get rid of
the fleas.

Even with this decision it is difficult to understand the
reasoning that will permit seedling fruit stocks and rose
and yet exclude ornamentals.

Horticulture must be in the rum class as it requires
such strict governmental supervision.

It is true good may come out of evil, even if plant ex-
clusion does not prevent epidemics of pests and disease
it may spur our own growers to greater efforts, but we
have no pride in such progress. We would prefer the
real American way, not by surrendering to an unseen
imaginary foe, but by recognizing a difficulty and over-
coming it. Insect and plant life are interdependent in
nature, and left to themselves the balance is maintained,
unfortunately in the social laws governing the commer-
cial exploitation of the flora of the country the entomolo-
gist holds the balance of power, the tail wags the dog.

LIVING UP TO A CODE In a business policy there are few of us
who do not recognize what ought to be
from what is common practice. But it
takes real courage to have a high ideal,
publish it and live up to it especially when it means re-
fusing business to live up to a code.

One of the most demoralizing things in the nursery
business is the almost entire lack of consistency in re-
gard to wholesale and retail prices. The wealthy con-
sumer can usually buy even lower than the trade.

The department store can buy to sell cheaper than the
local grower.

It almost seems as if there was a lack of morality
when it comes to selling nursery stock and although
most nurserymen recognize the difficulty of a fair deal
when selling to the consumer at the same time as cater-
ing to the trade, as evidenced by the many discussions on
the subject at conventions, few nurserymen seem ready
to act as pioneers to bring about better conditions.

There is nothing to prevent a firm from doing a whole-

sale and retail business but the house that can sell at wholesale and yet abstain from the injustice of competing and cutting under its own customers, has a very narrow road to travel.

The following advertisement from a local paper shows a courageous effort to bring about a more equitable condition of things:

PRINCETON NURSERIES

Beg leave respectfully to state that their business is EXCLUSIVELY WHOLESALE and with THE TRADE ONLY. They offer nothing for sale locally at retail. The favor of not being asked to deviate from this advertised policy will be appreciated. At the same time, they will be very glad to recommend to intending purchasers of trees and plants, reliable nearby nursery firms who can supply them.

October twenty-third.

Such a live and let live policy deserves all the encouragement and support it is possible to give, so as to bring about a better condition of things in the nursery trade.

CONSISTENCY? In view of the fact that the Federal Horticultural Board has just placed an embargo on practically all ornamental nursery stock, it is difficult to reconcile the opinion as expressed in the following from an editorial in the *Journal of Economic Entomology* of October 19, 1918, which is supposed to represent advanced thought in pathology, and such matters as pertain to the control of insect pests and diseases.

"The fact is that no system of commercial quarantine absolutely prevents the introduction of insects though it may greatly delay the establishment of many. Furthermore, a quarantine possible under present conditions might break under its own weight when the present war ceases and there follows a most extensive commerce between this country and at least certain European nations. This factor should be carefully weighed before great changes are made in our quarantine regulations. It is impossible to maintain a Chinese wall. We are an essential part of the world and as such must share the dangers as well as blessings of our position. The problem is to secure the maximum protection practicable with a minimum disturbance of international and interstate relations."—*Journal of Economic Entomology*, October, 1918.

December 12th, 1918.

The National Nurseryman Pub. Co.,
Flourtown, Pa.

Gentlemen:—

I am in receipt of the December number of the *National Nurseryman*, and wish to thank you for the notice that you have written in your columns of the search of the Association for superior nuts.

You may be interested to learn that at the present time nuts are received quite steadily as a result of the various notices that have been given on this search and I certainly trust that some of the nuts sent in will prove to be better than some of the nuts that are now being propagated.

Very truly yours,

WILLARD G. BIXBY, *Secretary*,
Northern Nut Growers' Association.

EXTRACTS FROM A LETTER DATED NOVEMBER 12TH, WRITTEN BY MR. CHARLES DETRICHE, SR., OF ANGERS, FRANCE, TO JACKSON & PERKINS COMPANY, NEWARK, NEW YORK, HIS AMERICAN AGENTS.

"Before answering your letters, I want to tell you what immense relief and joy exists here since yesterday: The Armistice is signed. The enemies of all civilization are reduced to asking for mercy. At last the beginning of better days is in sight, and a future of peace and quietness is in view for future generations. France has suffered much, and there are not many families who have not been touched in their deepest affections. At least we shall have the consolation of reaching the end, thanks to the assistance of all our Allies, and above all, that of the most recent one, who, in a few months, has done wonders. To recruit, equip, and send overseas such a quantity of excellent soldiers is an achievement which will never be effaced from the memory of the French people, and will give them a new and still deeper affection for the American nation."

PROMINENT NURSERYMEN VISITED HUNTSVILLE

Two of the leading nurserymen of the United States, and consequently of the world, were the guests of the nurserymen of Madison county on December 13 and 14. Mr. C. R. Burr of Manchester, Conn., and Mr. J. H. Dayton, of Painesville, O., notwithstanding the mud and the rain, visited the Huntsville Wholesale, the Chase and the Fraser nurseries and reported themselves to be astounded at the fitness of this climate and section for such agricultural endeavor. These distinguished visitors were weekend guests at the home of Mr. Robert Chase and left for the North Saturday evening.—*The Huntsville Mercury*.

SHADE TREE MEMORIALS

Shade trees as memorials to Milwaukee soldiers and sailors who lost their lives in the war is the plan which is under consideration by the Parks and Parkways Committee of the Civic Commission. A tree for each man would be planted and each would bear the name of the man whom it commemorates and other information about him.

The committee is considering two places for the trees. One plan provides for co-operation with other localities to have all such trees planted along the Lincoln Highway. The other plan is to make the project purely local and place the trees along a route connecting the city parks.

"The trees would be of various kinds," said John D. Ball, of the Civic Commission. "They would be planted in groups at points where it is desirable to gain the view of the passerby."

Care of Large Trees

The nurseryman is primarily interested in the growing and selling of small trees both fruit and ornamental so his interest in old or established trees on other peoples' grounds is only secondary.

There is, however, no one better fitted in training and knowledge of tree life to advise as to the care necessary to keep them in good condition or to treat them when disease or insects attack them, or wounds from storms and other causes endanger their well being.

In nearly all the older sections of the country there are thousands of old fruit trees going to pieces for the lack of intelligent care. Orchards that could readily be made into profitable producers in a much shorter time than it would take to bring young trees into bearing and at much less cost.

They could not be made over into modern commercial orchards but for home orchards to grow fruit for local consumption it seems a great pity that more attention is not given to them.

The recuperative qualities of an old apple tree are truly remarkable.

Cut out the dead wood, clean out and drain the cavities and thin out congested growth, and then spray with lime-sulphur solution and you have a new tree in no time even from hopeless looking specimens.

It is a curious fact that a large old tree is seldom viewed as a living plant that requires cultivation.

It is a safe estimate to make—that seventy-five per cent. of the trees growing on lawns die or become diseased through lack of food, the ground becomes impoverished around them and they begin to deteriorate. If anyone doubts it let them clean up an old orchard as advised above and then cultivate and fertilize and see what happens.

If one-tenth of the money that is spent on the so-called tree surgery were invested along common sense lines, in fertilizing, correct spraying of the trees, far better returns would be obtained.

If one concern can invest, as reported \$2,000,000 to advertise tree surgery annually it is easy to imagine the amount that is spent on this kind of work, yet anyone that is familiar with it knows the "tree surgeon" neither prunes the top nor supplies the needs of the tree at the root, also that the need of the mallet and chisel on a tree's trunk is due to long neglect, a little timely attention would have prevented decay.

The fad of "tree surgery" has been carried to an extreme, there is something amusing in the gullibility of a man who will spend several hundred dollars on an old cripple of a tree and yet begrudge a few dollars spent in fertilizer and care of a perfectly sound tree to keep it growing vigorously.

Occasionally one sees a fine specimen of a hard wooded tree such as the oak or beech upon which "cavity work" is a good investment but such work on old apple trees,

soft maples is to say the least foolish.

If such trees have cavities or decayed trunks through neglect, by all means clean them out, drain and paint them but spend the balance of the money in properly pruning and fertilizing rather than cement, tin and iron braces.

What the country needs to help make it beautiful is noble specimens of well grown, vigorous trees rather than cripples patched up with cement and supported with iron.

Some years ago an able gardener took charge of a large estate in the suburbs of Philadelphia upon which was a fine collection of trees that had been planted about sixty years ago. Many were beginning to deteriorate and die and were in pretty bad shape generally. As most of them were growing on the lawns in a position where the ground could not be worked, to those needing it a systematic feeding was given, where possible a heavy mulching of cow manure in the winter, and during the dry spells in summer, manure water was applied periodically to the ground around the trees as far out as the branches extended. It was astonishing to see how they responded to such treatment, yet after all it was only what the real plantsman would expect.

GOLDEN STAR

"But many a boy we hold
 Dear in our heart of hearts
 Is missing from the home-returning host.
 Ah, say not they are lost,
 For they have found and given their life
 In sacrificial strife:
 Their service stars have changed from blue to gold!
 That sudden rapture took them far away,
 Yet they are here with us today,
 Even as the heavenly stars we cannot see
 Through the bright veil of sunlight
 Shed their influence still
 On our vexed life, and promise peace
 From God to all men of good will.

What wreaths shall we entwine
 For our dear boys to deck their holy shrine?

Mountain laurel, manzanita,
 Goldenrod and asters blue,
 Yellow jasmine, silver pine,
 Wild azalea, meadow rue,
 Tiger lilies, columbine—

All the native blooms that grew
 In these fresh woods and pastures new,
 Wherein they loved to ramble and to play.
 Bring no exotic flowers:
 America was in their hearts,
 And they are ours
 Forever and a day."

HENRY VAN DYKE.

BOOK REVIEW

MANUAL OF VEGETABLE GARDEN INSECTS

Manual of Vegetable-Garden Insects is the title of a book just published by the MacMillan Co., 66 Fifth Ave., New York, by Cyrus Richard Crosby and Mortimer Demarest Leonard of the New York State College of Agriculture at Cornell University. This is one of the rural manuals edited by Prof. L. H. Bailey.

The contents are arranged in a very practical and easy-to-get-at-way, the insects being grouped under the vegetables they attack, for instance, those injurious to the cabbage and related crops, pea and bean insects, those that attack the cucumber, squash and melon, potato insects, etc.

This arrangement makes it possible to very readily identify the pest that is causing the damage and give the necessary treatment to control it.

There are also chapters on cut worms, and army worms, blister beetle, flea beetle, and unclassified pests.

The work should prove of immense value to the vegetable gardener. It is very thorough and its use should prove a valuable insurance against failure and loss of crops on account of insect pests.

The chapter on insecticides gives an account of the more important materials now employed, the directions for their preparation and use. The price of the book is \$2.50.

MANUAL OF TREE DISEASES

There have been a good many books and papers published on the subject of diseases of trees and plants. Many of them, however, are such as it is not easy for the layman or even the professional to refer to, and readily obtain the specific information he desires.

We are just in receipt of a copy of Manual of Tree Diseases by W. Howard Rankin, A. B. Ph. D., one of the rural manuals edited by Prof. L. H. Bailey, and published by the MacMillan Co., 66 5th Ave., New York, price \$2.50.

The book is so arranged that it is easy to find what the student is looking for, as the diseases are arranged under the trees they attack, Ash diseases, Chestnut diseases, Birch diseases, etc. In other words, if you have a diseased tree and know the common name of it you can readily refer to the diseases which attack it and by the help of this book, identify it and learn the treatment necessary to combat it.

There is a chapter on tree surgery, which we thoroughly endorse, as there has been a tendency of late years to give this work rather more importance than it is justly entitled to in the care and health of trees.

It is a splendid work for the student, and in fact, for anyone interested in arboriculture.

CAPITAL AND LABOR

A convention was recently held at Atlantic City under the direction of the Chamber of Commerce of the United States made up of 400 War Service Committees which will act in the future as the spokesman for industry before the government on the subject of industrial relations.

The convention heartily endorsed in letter and spirit the principles of the industrial creed so clearly and forcibly stated in the paper read to it by Mr. John D. Rockefeller, Jr., and urges upon all units of industry,—where they may not now be employed,—the application of such principles. Without approving or rejecting his particular plan or machinery, the principles advanced by Mr. Rockefeller are as follows:

1. Labor and capital are partners, not enemies; their interests are common interests, not opposed, and neither can attain the fullest measure of prosperity at the expense of the other, but only in association with the other.

2. The purpose of industry is quite as much to advance social well-being as material well-being and in the pursuit of that purpose the interests of the community should be carefully considered, the well-being of the employes as respects living and working conditions should be fully guarded, management should be adequately recognized and capital should be justly compensated, and failure in any of these particulars means loss to all.

3. Every man is entitled to an opportunity to earn a living, to fair wages, to reasonable hours of work and proper working conditions, to a decent home, to the opportunity to play, to learn, to worship, and to love, as well as to toil and the responsibility rests as heavily upon industry as upon government or society to see that these conditions and opportunities prevail.

4. Industry, efficiency, and initiative, wherever found, should be encouraged and adequately rewarded and indolence, indifference, and restriction of production should be discountenanced.

5. The provision of adequate means for uncovering grievances, and promptly adjusting them, is of fundamental importance to the successful conduct of industry.

6. The most potent measure in bringing about industrial harmony and prosperity is adequate representation of the parties in interest; existing forms of representation should be carefully studied and availed of in so far as they may be found to have merit and are adaptable to the peculiar conditions in the various industries.

7. The application of right principles never fails to effect right relations; the letter killeth and the spirit maketh alive; forms are wholly secondary while attitude and spirit are all important, and only as the parties in industry are animated by the spirit of fair play, justice to all, and brotherhood, will any plans which they may mutually work out succeed.

8. That man renders the greatest social service who so cooperates in the organization of industry as to afford to the largest number of men the greatest opportunity for self-development and the enjoyment by every man of

those benefits which his own work adds to the wealth of civilization.

RELOCATION OF LABOR

The conversion of the industry of the country from a peace basis to a war basis involved a general and important dislocation of labor. This movement was gradual. The end of the war involves a much more rapid change in industry; while there will be a great demand for labor to meet the foreign and domestic requirements there may be for a time in special places a temporary condition of unemployment.

GOOD PROMISE FOR SPRING BUSINESS

From almost every source comes optimistic reports of a promising spring business.

Orders are being booked for spring delivery largely in excess of other years.

It looks as if there would be freer flowing channels of distribution as the railroad situation seems to be clearing up.

There is small likelihood of costs coming down either in labor or material although the former ought to be easier due to demobilization and the stopping of so much war work.

Everything considered it looks as if the nurserymen were going to have as much business as they can attend to and at good prices.

E. J. Krug, 116 Broad Street,
New York, December 19th, 1918.

The National Nurseryman,
Flourtown, Pa.

Gentlemen:—

I beg to call your attention to a little joker in the new Quarantine Regulations, No. 37, which as printed, might prove a very serious matter for bulb importers.

According to a decision given recently the word "Tulips" as mentioned in the tariff laws, with no reference to bulbs, is held not to cover tulip bulbs. By the same token the words "Narcissus, Hyacinths, tulips and crocus as printed in the pamphlet issued by the Federal Horticultural Board may not be considered by the courts in the light of bulbs. True the words "certain bulbs" appear in Regulation 3 but they may refer in a legal way only to "lily bulbs" which are described as bulbs.

May I request you to kindly mail a copy of the National Nurseryman and bill for year's subscription.

Yours very truly,

E. J. KRUG.

AMERICAN ASSOCIATION OF NURSERYMEN

President—J. R. Mayhew, Waxahachie, Texas.

Vice President—J. Edward Moon, Morrisville, Pa.

Treasurer—J. W. Hill, Des Moines, Iowa.

Secretary for the Association—Chas. M. Sizemore, Louisiana, Mo.

Executive Committee—C. R. Burr, Manchester, Conn.; C. C. Mayhew, Sherman, Tex.; J. B. Pilkington, Portland, Oregon; J. Edward Moon, Morrisville, Pa.; E. S. Welch, Shenandoah, Iowa.

LIST OF COMMITTEES AMERICAN ASSOCIATION OF NURSERYMEN 1918-19

Finance—E. S. Welch, Chairman, Shenandoah, Ia.; E. W. Chatten, Winchester, Tenn.; T. B. West, Perry, Ohio.

Program—E. M. Sherman, Chairman, Charles City, Ia.; J. W. Hill, Des Moines, Ia.; Orlando Harrison, Berlin, Md.

Arrangements & Exhibits—Alvin E. Nelson, Chairman, Chicago, Ill.; F. R. Von Windigger, Clayton, Mo.; E. S. Welch, Shenandoah, Ia.

Hail Insurance—F. A. Weber, Chairman, Nursery, Mo.; E. P. Bernardin, Parsons, Kans.; H. D. Simpson, Vincennes, Ind.

Press & Publicity—Ralph T. Olcott, Chairman, Rochester, N. Y.; Jno. S. Kerr, Sherman, Texas; Chas. Sizemore, Louisiana, Mo.

Statistical—Henry B. Chase, Chairman, Chase, Ala.; Wm. Pitkin, Rochester, N. Y.; E. S. Welch, Shenandoah, Ia.; M. R. Cashman, Owatonna, Minn.

Landscape Architects—Thos. B. Meehan, Chairman, Dresher, Pa.; J. Edward Moon, Morrisville, Pa.; Wm. Flemmer, Springfield, N. J.

Nomenclature—J. Horace McFarland, Chairman, Harrisburg, Pa.; L. A. Berckmans, Augusta, Ga.; Chas. J. Malloy, Rochester, N. Y.

Standardization—Harlan P. Kelsey, Chairman, Salem, Mass.; F. L. Atkins, Rutherford, N. J.; Henry Hicks, Westbury, L. I.

Distribution & Directory—M. R. Cashman, Chairman, Owatonna, Minn. James Pitkin, Newark, N. Y.; Chas. H. Perkins, Newark, N. Y.

French Relief—F. L. Atkins, Chairman, Rutherford, N. J.; W. C. Reed, Vincennes, Ind.; Paul C. Stark, Louisiana, Mo.

Annual Report—Chas. Sizemore, Chairman, Louisiana, Mo.; Paul C. Stark, Louisiana, Mo.; F. R. Von Windigger, Clayton, Mo.

Vigilance—Paul C. Stark, Chairman, Louisiana, Mo.; Robert Pyle, West Grove, Pa.; Henry B. Chase, Chase, Ala.

Arbitration—Jno. S. Kerr, Chairman, Sherman, Texas; G. A. Marshall, Arlington, Nebr.; J. M. Pitkin, Newark, N. Y.; Jno. Dayton, Painesville, Ohio; T. W. Stark, Louisiana, Mo.

Legislation—Orlando Harrison, Chairman, Berlin, Md.; Jno. Dayton, Painesville, Ohio; Robert C. Chase, Chase, Ala.; J. M. Pitkin, Newark, N. Y.; C. C. Mayhew, Sherman, Texas; F. H. Stannard, Ottawa, Kans.; Thos. B. Meehan, Dresher, Pa.

Tariff—Theo. J. Smith, Chairman, Geneva, N. Y.; Irving Rouse, Rochester, N. Y.; J. Edward Moon, Morrisville, Pa.; Thos. B. Meehan, Dresher, Pa.; James Pitkin, Newark, N. Y.

Transportation—Charles Sizemore, Louisiana, Mo.

STATE AND DISTRICT ASSOCIATIONS

American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.

California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurseryman's Association—President, Walter E. Campbell, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.

Illinois Nurserymen's Association—President, Guy A. Bryant, Princeton, Ill. Secretary, A. M. Augustine, Normal, Ill.

Massachusetts Nurserymen's Association—President, John Kirkegaard, Bedford, Mass. Secretary, David C. Stranger, West Newbury, Mass.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

New England Nurserymen's Association—President, A. E. Robinson, Lexington, Mass.; Secretary, R. M. Wyman, Framingham, Mass.; Annual meeting will be held on the last Tuesday in January in Boston.

New Jersey Association of Nurserymen—President, Carl H. Flemer, Springfield, N. J. Secretary-Treas., A. F. Melsky, Elizabeth, N. J.

New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.

Ohio Nurserymen's Association—President, T. J. Dinsmore, Troy, Ohio; secretary, W. B. Cole, Painesville, Ohio.

Oregon—Washington Association of Nurserymen—President, C. F. Breilhaupt, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.

Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.

Pennsylvania Nurserymen's Association—President, Adolf Muller, Norristown, Pa. Secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, O. W. Fraser, Birmingham, Ala.; Vice-president, H. C. Caldwell, Atlanta, Ga.; Secretary and Treasurer, O. Joe Howard, Pomona, N. C. The next meeting is to be held in Birmingham the 21st and 22nd of August.

South Western Nurseryman's Association—President, W. A. Wagner, Durant, Okla. Vice Pres., J. M. Ramsey, Austin, Texas. Secretary-Treasurer, L. J. Tackett, Fort Worth, Texas. The next meeting will be held in Dennison, Texas, First Wednesday in September.

Tennessee Nurserymen's Association—President, George W. Poague, Graysville, Tenn. Secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Tennessee State Florists' Association—President, Leon Geny, Nashville, Tenn. Secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, William B. Munson, Denison, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.

Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

MR. DOOLEY ON THE PROHIBITION OF IMPORTS

(With apologies to Mr. F. Peter Dunne)

Me deaar Hinnessy,

I taake me faithful Oliver in hand ter indite yer these few lines iv eheer and eumfut.

Ye'll be askin me iv I've heaard tell iv the latest noo prohibition? I hev. Tis a era iv prohibition, Hinnessy. Twus ter be ixpected along iv other throubles thet eum wid the votes fer wimmin. Wid Congress takin to wather and the game iv authors, us min, Hinnessy, must rayeoneile oorselves ter wearin the shurt the second wake while oor wimmin runs the politics and votes us prohibition.

Ye're findin fault wid this noo prohibition iv impoorted plants. Ye're wrong, Hinnessy. Ye're sayin yer sees no more danger iv Dootzies bringin in furrin bugs than eherry seedlins; an that's because ye air only a nurseryman, Hinnessy, and lacks the seientific mind. Ter the seientific mind, tis perfectly clear. Oor intimologists hez discovered thet thim furrin bugs thet fattens on Dootzies and Spireas, wud staarve ter dith on the forrage afforded be fruit-tree seedlins. Tis well-known iv the feedin-habits iv furrin bugs, thet ornamentals is fruit to em, while fruit-stocks is jist ornamental. Ye don't understand thet, ye says? Yer ignorance, Hinnessy, while appallin, is shared be ithers.

This here prohibition iv furrin bugs an plants, Hinnessy, is not ividence iv jealousy on the paart iv the intimologists. Ye're wrong agin. An tis imperlite fer ye to repeat thet oor own depaartmint iv agriculture impoorted white pines frum Heinz, in Germany, whin, wid throe German ginerosity, they throwed in the blisther-rust fer good measure. Tis not, as ye suggist, thet oor officials suspect thet one iv the 57 varieties is still missin. Tis not jealousy at all.

Ye see, Hinnessy, tis like this: yez an me can still impoort oor fruit-tree seedlins, which tis well-known niver hed brown-tail nor ither butterflies secreted on thim; but the Dootzies and ornamentals, Hinnessy, bein extremely susceptible ter bugs, must be impoorted through the Fedral Horticulture Bored for thrial at Washinton; thim, afther the suspected bugs hez bin interned a soot-able lingth iv time under the Espionage Act, they can be aequired be me and you and ither nurserymen in the strickly offieial way iv the pine blisther-rust.

I'm thinkin, Hinnessy, thet ye're baarkin up the wrong throe. Me own ipinion is thet this pathriotie and constructive wurruk is doo ter the Waar Departmint entirely, instid iv the Horticulture Bored. Tis like this: The waar's over and the min's goin hum. But oor greaat war strategists an oor stoodents iv military tactics hev had but time to git started; they're inthrested in the greaat seience iv waar; an mebbe they hev some plans to wurruk out wid the bugs, lackin rale sojers. Ez I figgers it out, Hinnessy, tis mebbe the plan, instid iv lettin thim furrin bugs wander in aimless be evadin oor Se-

cret Service men, conealed on ornamentals but not on fruit stocks,—to mobilize all thim furrin bugs in Washinton and thim ter arrange a greaat pitched battle bechune thim an oor own bug foorcees in the National Botanie Gaarden, where, under the watchful eyes iv the official gardeens iv oor orchards and gardens, the Depaartmint iv Agriculture hez mobilized sich an assortment iv bugs ez you an me and ither mere nurserymen, Hinnessy, cud niver hope to ekal in oor strickly amatoor way. Sich military manoeovers bechune the furrin bugs an oor "Department iv Agriculture's Own," wud bring no misgivins to oor pathriotie buzzums. Twud be a greaat sight if arranged be the Ginral Staff an the Bored iv Strategy assisted be the Horticulture Bored. I'm thinkin, Hinnessy, tis whut's in the mind iv the Horticulture Bored. I suspect nawthin else iv bein there, mind ye.

Whut do I think iv the freedom iv the seas? ye ast me. Well, Hinnessy, I'm thinkin the Prisidint's gone acrost ter presarve the freedom iv the seas, because the seas is about the only land thet's still free, accordin to latest noos.

An, whut do I think iv prohibition? Well, Hinnessy, I'm fur it. I sez be all means, let's prohibit prohibition.

Yer throe frind,

DOOLEY.

 SPRING BUSINESS

The question that interests most nurserymen at this time is what sort of business are we going to have next spring. If the business done by the various shops and stores throughout the State is any criterion, this is going to be the best on record. From all sources come reports that Christmas buying has beaten all records, showing the American public is returning to normal, after the long period of saving for war bonds, etc.

There is no doubt that at the advent of spring their thoughts will begin to turn to outdoors, and the garden, lawn and orchard will be uppermost in their thoughts.

What few reports have come to hand from nurserymen in various parts of the country are mostly all favorable, a number of them having already booked more orders than usual. Add to this the fact that labor will be much easier, due to the demobilization of war workers and drafted men, and the prospects do seem bright.

At any rate, it will be a safe provision to be prepared for a very busy season.

We congratulate you on having such a good paper as yours is and seems to be growing better all the while, for the nursery trade needs just such information and get-together spirit as you are trying to boost.

CHINESE PRODUCTS OF INTEREST TO NURSERYMEN

By Julsan Arnold, Commercial Attache, Peking, in Commercial Reports.

The West has much to learn from China's dietary. It is far more scientific than westerners are inclined to believe. It is rich and economical. Many of the products in the Chinese dietary could be advantageously adopted by occidental countries. The writer has yet to find the Chinese who, after years of absence abroad, returns to his country preferring the Western dietary to that of his own people. On the other hand, scores of westerners in China are as fond of Chinese food as they are of their own, and some seem to prefer it. At all events, there are Chinese dishes that have come into great favor with westerners living in China.

The Chinese use many varieties of fungi in their dietary. Dried mushrooms are popular with Chinese everywhere. They are gradually assuming a position of importance in the export trade. In 1917 China exported 200 tons; it is likely that this amount includes fungi other than mushrooms, as the customs authorities probably do not distinguish. Foochow is the center of this trade. It exported to other ports in China and to foreign countries a total of 300,000 pounds of dried edible fungi. They are grown in the mountainous districts in the interior of Fukien, on hardwood logs felled for the purpose. Incisions are made in the logs, liquid manure is poured over the incisions, straw is covered over them, and when this is well rotted the fungi spring forth. So reports Consul Pontius, of Foochow, who also states that snow, frost, and rain are necessary to insure a good crop of tasty fungi, and that the winter crop is considered more delicious than the spring crop.

NARCISSUS BULBS—A short distance inland from Amoy there is a bit of marshy ground which produces the bulk of the narcissus bulbs that are so highly prized by Chinese everywhere and that for many years have been an article of export. Three million bulbs is the usual quantity produced annually for shipment, one-third of these going abroad. Once each year during the month of July a trans-Pacific steamer calls at Amoy to take on a shipment of these bulbs to supply the trade in the United States, consisting mostly of Cantonese people.

The southern Provinces of China produce many varieties of oranges, the most famous of which is the delicious sweet Swatow "honey orange," of which 6,000 tons are exported annually. Mr. Meyer says that 80 different varieties of oranges are produced in China.

JUJUBES AND PERSIMMONS. ERRONEOUSLY CALLED "DATES"—OTHER CHINESE FRUITS—North and West China produce excellent varieties of jujubes, which when dried are erroneously termed red dates, as well as persimmons, which when dried are erroneously called black dates. These make excellent confections for table use. China exports about 3,000 tons of black and red dates" besides producing large quantities consumed locally. The jujubes are eaten fresh, dried, stewed, or smoked. When dried they somewhat resemble a large

dried date. They are boiled in sugared water, then dried. Honey is added for the best grades.

China is rich in fruits, although scientific methods have not been applied in their growth, cultivation, and care. In the north, peaches, apricots, pears, grapes, apples, persimmons, plums, haws, and jujubes are grown in plentiful quantities and numerous varieties. In Central China, peaches, loquots, apricots, pears, and plums, and in South China oranges, pomeloes, lungnans, lichees, loquots and bananas are found in abundance. Mr. Frank N. Meyer, explorer for the United States Department of Agriculture, has written an interesting report, entitled "China's Fruits and Nuts," which may be obtained from the Department of Agriculture.

SOURCES AND CHARACTERISTICS OF GALLNUTS—Gallnuts, or oak apples, are produced by insects on certain trees, the *Rhus javanica* and the *Rhus polaninii*, found in mountainous regions of West Hupeh, Hunan, Kweichow, Szechwan, and Kwangsi. "The galls are oblong, rough, and tubular, the shell hard, brittle, and gummy, and the hollow center has a cottony ball, the covering of the pupa." They are used to dye silks black, in tanning, and as medicine. They are reputed to furnish the finest tanning extract in the world. China exports gallnuts to the value of 1,000,000 taels a year—about 15,000 tons—75 per cent going to the United States, which now controls this trade. Hankow and Chungking are the principal ports of export.

GINGER AND GALANGAL—Ginger (*Zingiber officinale*) is grown in the West River and hilly districts of north-western Kwangtung, throughout Szechwan, and in certain central Provinces. It is eaten to a considerable extent in the green state as a condiment and a corrective. The preserved ginger comes mostly from Canton. Galangal (*Alpinia officinarum*) is sometimes mistaken for ginger proper. It belongs to the ginger family. The root is smaller than that of the ginger, being usually about two inches long and half an inch thick. It tastes like a combination of ginger and pepper. It is used as a preserve, like ginger, and also medicinally. A good deal of it goes to the United States as ginger. It is cultivated in the island of Hainan, off the Kwangtung coast. China exports about 1,000 tons of galangal and 5,000 tons of ginger annually.

CAMPBOR, *Cinnamomum camphora*—The camphor of commerce is made from the camphor tree by destructive distillation. The trees, after reaching 50 years of age, are cut down, chipped, the chips boiled in vats, and the distillate collected in crystals upon straw. It is put through a refining process. Camphor is used mainly in the manufacture of celluloid, smokeless powder, fireworks, and medicines. The island of Formosa, where the camphor is held as a Japanese Government monopoly, supplies about 75 per cent of the world's consumption. German chemists produced a synthetic camphor, but because of the use of turpentine, which constantly increased in value, this only has the effect of keeping the monopoly prices from ascending to unreasonable figures. Japanese interests tried about 12 years ago to secure a monopoly on the production of camphor in Fukien Province, the main source of China's supply, but failed. As there has been no systematic replanting in China, the number of trees has continually decreased until Fukien's supplies

have become nearly exhausted. Kiangsi, Szechwan, and Yunnan Provinces are said to have considerable numbers of trees, especially the inaccessible regions of southwestern Yunnan. During 1917 China exported 473,000 pounds, valued at 261,000 taels or United States dollars, 90 per cent of which came from Kiangsi Province.

CASSIA BARK AND OIL—Cassia (*Cinnamomum cassia*) is a large and useful tree found on the borders of Kwangtung and Kwangsi Provinces and in South China generally. The bark, cassia-lignea, is stripped off, allowed to lie for 24 hours, during which time it undergoes a species of fermentation, and the epidermis is easily scraped off. It dries into a quilled shape, in which it comes to market. It is smaller quilled, breaks shorter, and is less pungent and acrid than cinnamon. During 1916 10,000,000 pounds of the bark were exported from Canton via Hongkong. Cassia oil is obtained from the leaves and the twigs by distillation and is used in medicine. It is also used in perfumery and flavoring condiments. Cassia buds, refuse, and twigs to the extent of 6,000,000 pounds were exported during 1917.

CASTOR OIL—The extensive use of aeroplanes in the war has greatly increased the demand for castor oil, which is used as a lubricant for the motors. It is used for mixing with paints, for medicinal purposes, for cooking and illuminating purposes, and for mixing the colors for Chinese seals. The oil is extracted from the seeds by simple pressure. The crude oil is boiled with water, which separates the alkaloids and other impurities, the water being then evaporated. In China castor beans are planted on the borders of fields to prevent animals from wandering onto the fields, as the beans are poisonous because of the alkaloids they contain, and the animals will not devour them. They are found quite abundantly over most of China. The oil has only recently found a place in foreign trade. The price now (September 18, 1918) is 22 cents a pound, as compared with 12 cents a year ago. There should be good prospects for the development of this trade.

MAKING A START IN BUSINESS

The first movements in business are usually taken with faltering steps, the novice feeling his way over the rough ground and difficult places he must cover in his climb to the top.

When making your start it is no indignity to acknowledge to yourself and the world that you are a novice, as by so doing you gain more respect than by attempting to bluff your way along, only to be halted with a short turn by some unfeeling customer.

Business is a close game of matching wits, with truth the dominant feature. Truth is the new power in business. It is beyond the power of one man to outline a course in business success, but the following will be found highly beneficial.

Be a good listener. Thus you will gain from wisdom and experience. Study trade journals and read the advertisements of other merchants. You will thus be able to obtain a wonderful working knowledge of your own line. Be modest in your own achievements, once success comes. Last but not least, as success arrives, show your satisfaction with the community, so that you may be

known as a man in the fullest sense of the word, not a mere dollar chaser.

The machinery of business is intricate. When a contractor constructs a building or a mason erects a wall, he and his workers abide by the plans until the job is done. In business, however, there can be no cut-and-dried plan of operation, simply a matter of keen judgment, tact and work every minute in the business day.

Walls can be rebuilt, the building torn down and altered, but in business once the spoken word leaves your lips it cannot be recalled, no matter how dire the need or what the damage may be. Use extreme care in speech, deportment, business action and methods. As you learn, so you earn, and the man with the greatest capacity for learning has, as a rule, the greatest earning power.

A young man was made manager of a shoe store which has as its selling force two clerks who had grown gray in the service of the former manager. The disciple of the new way of selling goods asked the clerks to tell him what they really knew about selling shoes. The clerks thought he was joking and smiled in a superior sort of a way. The new manager, however, by insisting on answers to a few pertinent questions, found that the clerks had been selling shoes for ever so long by a rule-of-thumb method which, while satisfactory from the immediate view, did not establish a lasting trade.

Now all is changed. The first move was for each sales clerk to take a complete course in modern shoe fitting, including the study of the structure of the foot. In that store now service, science and satisfaction are sold with every pair of shoes.—*Philadelphia Public Ledger*.

THE KATSURA TREE

When one writes of flowering trees for the lawn, the Katsura tree, *Cercidiphyllum Japonicum* cannot be included, for, though it flowers, the blossoms are so small and colorless as to be practically inconspicuous.

Nevertheless, it can be recommended as a most deserving ornamental tree, which will please everyone who may plant it. Its habit of growth and its handsome foliage are particularly pleasing. In outline this tree is broadly pyramidal, and well clothed with foliage to the ground. The foliage is almost heart-shaped, the leaves well arranged in pairs, well developed leaves being two to three inches in length by two in width. What adds greatly to its beauty all summer is the rosy purple color of the leaf stalks, blending well with the green of the leaf; and then the veining of the leaves, of a lighter green than the body, adds further to the attraction. The under side of the leaves is of a much lighter color than the upper surface and is beautifully veined. It is regarded by all familiar with it as one of the most beautiful ornamental trees known for summer, and when autumn comes the foliage before falling becomes of a deep yellow.

To have the *Cercidiphyllum* do its best it should be planted preferably in deep, moist soil, though it does very well in any ordinary situation; but its foliage is much handsomer when in deep soil than in any other position. A dry soil it does not like at all.

TREES AS MEMORIALS

The suggestion to plant trees as memorials appeals to the good taste of all. It is so eminently fitting and proper.

Some may object to them as being too transient in comparison with the stone monument but one has only to visit the church yards and other resting places of past generations to prove the fallacy of this objection. The stone monument falls into decay and loses its connection with the living as soon as the generation placing it has passed away leaving nothing but a useless misplaced stone.

The beauty of the more modern cemeteries owes nothing to the monuments and mausoleums and everything to the trees, shrubs, flowers and roadways. Even Gettysburg with its millions of dollars spent in monuments will not be remembered any longer on account of them and they do not add to the beauty or sacredness of the ground.

It is perhaps not seemly to disparage anything that has been done in an attempt to express the debt we owe to those who sacrificed all, yet we owe it to them to put to the best use those things for which they died and that is the happiness of the living.

Would not avenues of noble trees, sacred groves and gardens, making fitting enclosures for the temples of fame in which to inscribe the honor rolls of the country, be better than useless stones dotted over the landscape?

Would it not better keep alive the memory of future generations?

If we judge by what is past it undoubtedly would and also bring those memories into the everyday life of the people.

THE FAMILY TREE

The old English family tree did not grow in the earth. It had to do with human genealogy, the lineage of mankind.

Not every family, by any means, boasts of a coat of arms, nor of blue blood ancestry. All of us cannot have a family tree, according to the English idea, but we can and should all have what is of vastly more practical importance, namely, at least one pet shade or fruit tree of our very own. One who has never experienced it can realize the pleasure and interest to be derived in planting a tree oneself and watching it grow from year to year. Every leaf, shoot and branch it puts out is noted by the tree's owner, and as its growth continues, and it begins to bear fruit, if it is a fruit tree, its value in the eyes of the planter enhances.

We all remember the old poem "Woodman Spare That Tree." The story was not overdrawn. The average man or woman would almost as soon part with a favorite dog or horse as to see a nice tree on the homestead destroyed.

And then, too, a good fruit tree has an actual money value. For instance, a little cherry tree, space for which can be found in almost any back or front yard, will produce as much fruit of that variety as the average small family will need for their winter's supply. To buy the cherries in market would cost several dollars.

The horticultural experts advise planting a tree in a hole large enough in which to bury a horse. Digging

such a hole is hard work—unnecessary work, too. They simply mean plant in soil that has been well broken up to give the roots a chance to expand and that will properly conserve sufficient moisture to sustain the tree.

During the past seven or eight years that object has been attained, without the hard digging, by using a quarter pound of low-grade dynamite to make each hole. A bore hole is driven down about 24 to 30 inches with a pointed steel bar or soil auger. The little piece of dynamite is pushed to the bottom and tamped in well. The shot is fired with cap and fuse. This breaks up the soil nicely throughout a radius of five or six feet. Proper drainage and aeration conditions are established and the tree has every chance to live and thrive. Thousands of shade and fruit trees have been planted in this way in recent years.

RED TAPE

If we run the gamut of human government we find the red flag at one end and red tape at the other, the two extremes, somewhere in between we have the happy medium of liberty which fosters progress and happiness.

The government of the horticultural world in fact the business world of this country is fast approaching the red tape end.

The well intended rules, regulations, restrictions, embargoes, quarantines, permits, inspections, licenses and endless other curbs and restraints are so binding and entangling action that they impose a serious drag on movement of any kind.

No doubt each provision was considered a necessary safeguard for somebody or something when applied, but now have become a letter of the law with the spirit flown away and forgotten.

The nursery business reminds one very much of the man who always hampers himself with an umbrella so he won't get wet, a lantern so he won't get caught in the dark, a compass so he won't get lost, provisions for fear he will be caught where he cannot get anything to eat, besides soap, a medicine chest and clothing to suit all conditions, he may be considered wise but he carries a load that considerably hampers his movements.

The difference being in favor of the man because with the nursery business (the wise provisions?) are not self imposed, and there is no appeal even though they are futile to accomplish the object intended.

What is really needed is a legislative body that is as active in unmaking ill-considered laws as our present one is in making them.

RESUMPTION OF FOREIGN SHIPMENTS

F. J. Grootendorst & Sons, 10 Broadway, New York have been informed by the Holland American Line Freight Department that the S. S. New Amsterdam will sail from Rotterdam in the very near future and will bring various shipments of nursery stock from Holland.

It is inconceivable how any nurseryman with red blood in his veins could manage to get along without the National Nurseryman.

W. F. WEBB.

Notes from Arnold Arboretum

DWARF CONIFERS. Of the many cone-bearing trees there are abnormal dwarf forms, and a few conifers are naturally dwarf shrubs. The former are of different origin; most of them are seedlings, some have grown from buds on branches of large trees, and others have been produced by exposure to excessive cold and high winds, and these when transferred to more favorable surroundings often lose their dwarf habit. A good example of a dwarf of the last class is the depauperate Larch which grows at the timber line on Mt. Fugi in Japan. Seedlings of this little plant raised in the Arboretum twenty-five years ago are now nearly of the same size as the seedlings of the trees of the Japanese valleys raised at the same time. In the sandy swamps of Prince Edward Island Black Spruces not more than two feet high produce cones and fertile seeds, and near the timber line of the White Mountains it is possible to walk on dwarf mats of the Balsam Fir which lower down on these mountains is a tall tree. Transferred to better soil where the winter climate is less severe these alpine and boreal dwarfs would soon assume the tree habit of the species. Dwarfs of some species, however, which evidently owe their habit to environment, retain the dwarf habit when transferred to more favorable surroundings. Such dwarfs are some of the forms of the European *Pinus montana* from high altitudes and some dwarf forms of Junipers which reproduce the dwarf form in their seedlings. Seedling dwarfs have been produced by many different species, but they are naturally most numerous in species which have been largely raised in nurseries where seedlings are carefully watched and abnormal forms are preserved. It is not surprising therefore, that trees like the eastern Arbor Vitae and the Norway Spruce have produced many such forms in nurseries as few other cone-bearing trees have been so largely raised from seed.

It is only in recent years that dwarf conifers have attracted much attention, for Loudon in his "Arboretum et Fruticetum Botanicum" published in 1838 enumerates only ten. These are two dwarf forms of *Pinus montana*, two forms of the Norway Spruce, a dwarf Cedar of Lebanon, a dwarf Red Cedar (*Juniperus virginiana*), a prostrate form of *Juniperus sabina*, and two dwarf forms of *Juniperus communis*. He knew no dwarf Arbor Vitae, Chamaecyparis, Hemlock, or dwarf form of Abies. Beissner in the second edition of his "Handbuch der Nadelholzkunde," published in 1899, enumerates one hundred and four dwarf conifers in thirty-one species; of these twenty-five are forms of the Norway Spruce, eight are forms of Lawson's Cypress (*Chamaecyparis Lawsoniana*), and eight are forms of the Arbor Vitae of

the eastern United States. In addition to the plants enumerated by Beissner there are a few which originated in this country and which do not appear to have been known to him.

There is a good but by no means a complete collection of dwarf conifers in the Arboretum, for it is difficult to keep track of the new forms which appear in the nurseries where large numbers of conifers are raised from seed and are often given names without descriptions, and some dwarfs like those of Lawson's Cypress and the Chinese Arbor Vitae are not hardy here. The Arboretum collection is much visited, however, by nurserymen for there is now a demand for these plants, which have their uses in small gardens and are less happily planted in making low banks of foliage about the base of suburban cottages.

Perhaps the handsomest of the dwarf conifers in the Arboretum collection is a form of the Japanese *Pinus densiflora* (var. *umbraculifera*). This is a wide, vase-shaped plant which in Japanese gardens is often ten feet high and broader than high. The leaves are of a bright cheerful green and comparatively small plants flower and produce minute cones. Among the fourteen or fifteen dwarf forms of the Norway Spruce none is handsomer than one of the varieties described by Loudon in 1839 (var. *Clanbrasiliana*). This is a low, very compact, round-topped bush which rarely grows more than three feet high but spreads to a diameter much greater than its height. The plant is said to have originated on the Moira estate near Belfast, Ireland, toward the end of the eighteenth century and to have been carried to England by Lord Clanbrasil for whom it was named. Equally good is the variety *nana* which has a flatter top and does not grow as tall as the *Clanbrasiliana* but spreads into a broad bush. The subglobose var. *Gregoriana* and the variety *prostrata* are interesting plants. Some of the dwarf Norway Spruces, especially the variety *Ellwangeriana*, have a tendency at the end of a few years to form a vigorous leading shoot and eventually to become arborescent.

Two dwarfs originated in the Arboretum in 1874 among seedlings of *Picea pungens*, the Colorado Blue Spruce and *Abies lasiocarpa*. The original plant of the former is now seven feet high and ten or twelve feet in diameter, and has so far escaped the loss of branches which disfigures this Spruce after it is thirty years old. Although well worth the attention of lovers of dwarf conifers, *Pinus pungens compacta* is little known beyond the limits of the Arboretum. The seedling of *Abies lasiocarpa* retained its dwarf habit for many years but has now begun to grow more vigorously and to assume the typical habit of the species. The dwarf of the European Silver Fir (*Abies Picea compacta*) behaves here in the same way and after a few years grows out of its dwarf habit. There is in the collection a small plant of a dwarf of *Abies concolor* which is very compact, but it is

too soon to speak of its value. The well known dwarf of the Balsam Fir (*Abies balsamea* var. *hudsonica*) is a real dwarf only a few inches high. A number of seedling forms of the White Pine (*Pinus Strobus*) and of the Scotch Pine (*Pinus sylvestris*) are in the collection, but the best known and most generally planted dwarf Pines are the mountain forms of the European *Pinus montana* which appear in the catalogues of nurserymen as *Pinus pumilio* and *P. Mughus*. There are many forms of this hardy dwarf; they are broad shrubs with erect or semi-prostrate stems and are rarely more than ten feet high, but often much broader than tall. Seedlings of these plants show great variation in size and habit, and new forms are constantly found in nursery seed-beds. The dwarf form of the Douglas Spruce (*Pseudotsuga Douglasii* var. *globosa*) has proved one of the slowest growing of these plants in the Arboretum collection.

In the common Hemlock of eastern North America the tendency to variation in seedling plants is unusually strong and dwarfs differing in size, shape and vigor are often found in the neighborhood of Hemlock groves. Some of these have been propagated and have received names but as different names have been used for the same or nearly the same forms it is not now possible, even if it were desirable, to distinguish all these dwarf Hemlocks by name.

Among the seedlings of the Arbor Vitae of eastern North America are found some of the handsomest of the dwarf conifers. There is a large collection of abnormal forms of this tree in the Arboretum collection and among them none are better than those called "Little Gem," *compacta* and *Hoveyi*. Seedlings of the Japanese Retinisporas (*Chamaecyparis obtusa* and *pisifera*) show, too, a great tendency to variation. One of the handsomest of these forms is *C. obtusa nana*, a compact, pyramidal, slow-growing plant. The largest specimen in the collection is now about eight feet tall. Other forms of *C. obtusa* are compact mats which show little indication of growing more than a few inches high. In the collection there are among others dwarf forms of *C. pisifera*, plants with yellow-tipped branches and others with yellow and with white leaves and plants of the variety *filifera* with green and with yellow leaves.

Among the Junipers are found some of the most useful dwarf conifers. Some of these are forms of arborescent species and others are natural dwarfs which reproduce themselves from seed. Among the former are three varieties of the so-called Red Cedar of the eastern states (*Juniperus virginiana*). One of these (var. *globosa*) is a compact, round-topped bush taller than broad, and in the Arboretum collection where it has been growing for fifteen years it is about three feet high. The history of this plant is not known at the Arboretum. It came here from Holland and probably originated in a European nursery. The variety *Kosteriana* forms a wide open bush with erect and spreading, gracefully arching

stems from two to three feet tall. This is an unusually handsome plant which will prove useful for the margins of beds of taller growing conifers. This variety probably also originated in a European nursery. More interesting even than these nursery forms of the Red Cedar is a plant which grows on a few wind-swept cliffs on the coast of Maine. Plants of this form are not more than eighteen inches high, with prostrate stems which spread into dense mats sometimes fifteen feet across. These plants bear fertile seeds, and there are seedlings, grafted plants and young collected plants growing in the Arboretum, but it is too soon to judge if they will retain the habit of the wild plants when planted in less exposed situations. If this form of the Red Cedar retains its dwarf habit in cultivation it will be one of the handsomest of the prostrate Junipers. Of *Juniperus chinensis* there are a number of interesting shrubs in the Arboretum collection. The handsomest of these, var. *Pfitzeriana*, which grows in the form of a low broad pyramid, is the most satisfactory of all Junipers in this climate. Fortunately it can now be found in most American nurseries. There are dwarf round-topped forms of *J. chinensis* with green and with yellow leaves which are less than a foot high; and a form of this Juniper, var. *Sargentii*, from northern Japan with prostrate stems makes mats now eight or ten feet across here. This is a form reproducing itself from seed and has proved to be one of the best of the mat-like Junipers in the collection. With the exception of the dwarf form of the European *J. sabina* (var. *minor*), the lowest Juniper in the collection is *J. horizontalis* which has long prostrate stems with blue-green or in some forms steel blue leaves. This is a North American plant which is widely distributed from the coast of Massachusetts to British Columbia. There are fine masses of this plant in the collection. Less well known is *J. conferta*, another species which covers with long prostrate stems the sand dunes on the coast of Japan. Raised first in the Arboretum three years ago from seeds collected by Wilson in northern Japan there is every reason to believe that this will prove a useful plant in this country. Another prostrate Japanese Juniper, *J. procumbens*, is better known. It is distinguished by its sharply pointed leaves marked on the upper surface by two white lines. This Juniper has not produced seeds and is not known except as a cultivated plant; it is planted, however, in nearly every Japanese garden and has been much planted in California and occasionally in the eastern states. A dwarf Juniper, *J. communis* var. *depressa*, covers thousands of acres of hillsides in the northeastern states where many forms occur differing in the height and in the width of the leaves. These are coarser and less desirable garden plants than *J. horizontalis* and the different low-growing varieties of *J. chinensis* and *J. virginiana*.

THE NEW ENGLAND NURSERYMEN'S ASSOCIATION

The seventh annual convention of the New England Nurserymen's Association will be held at Hotel Bellevue, Boston, Tuesday and Wednesday, January 28th and 29th, 1919.

A program has been arranged which it is expected will attract wide interest among the growers of trees and plants in New England, inasmuch, as important topics are to be discussed by able speakers. Among the more important are the "Proposed Quarantine on Importation of Nursery Stock" recently approved by the secretary of the United States Department of Agriculture, and which is to take effect on or after June 1st, 1919, the "New Rules Effecting Transportation," and "New Laws Relating to the Distribution of Nursery Stock in Interstate Commerce." The latter will be discussed by Curtis Nye Smith, Esq., of Boston, Counsel for the American Association of Nurserymen. Perhaps the most interesting feature to the general public will be the illustrated lecture to be held Tuesday evening; the subject being "How can we make New England more Fruitful, and more Beautiful?" Another timely topic for discussion which will interest all growers, will be presented by Mr. William H. Judd of the Arnold Arboretum. His subject will be "New Ornamentals of Real Merit Nurserymen should Grow." The war has brought changes to nurserymen as well as to those in other lines of trade, and under the new conditions it will be necessary to grow a wider range of hardy ornamental trees, shrubs and plants to take the place of those, as far as possible, which have heretofore been imported from foreign countries.

PEACH SEEDLINGS AND CUTTINGS

We have for quick shipment 30,000 Peach Seedlings 3-16 and up. In cuttings we have Brown Turkey and Celestial Fig, Oriental Plane, Carolina and Lombardy Poplar, Willow, California and Amoor River Privet, Spirea, Deutzia. Prices upon application.

THE CURETON NURSERIES - Austell, Georgia

Under the present conditions we find the mail is often delayed and we ask our patrons to please send advertising matter promptly to our office at Hatboro, Pa.

Surplus Trees For Quick Shipment

Oriental Plane, Carolina and Lombardy Poplars, Maples, Catalpa Speciosa, Babylonian Willow, all sizes, California, Amoor River, Ciliatum and Ibota Privet, Spirea, Deutzias, Altheas, Lilac, Crape Myrtle, Forsythia, Junipers, Thuyas, Biotas, Roses, Walnuts, Pecans, in any quantity and sizes. We guarantee satisfaction.

THE CURETON NURSERIES - Austell, Georgia

L.R. TAYLOR & SONS

TOPEKA - - - - KANSAS

FOR SPRING 1919

A fine lot of—

KIEFFER PEAR SEEDLINGS

JAPAN PEAR SEEDLINGS

FOREST TREE SEEDLINGS

also

A Large Assortment of Two and Three Year

APPLE TREES

FOREST TREES, SHRUBS, ETC.

Best sorts in new and standard

ROSES

THE LEEDLE FLORAL COMPANY®
SPRINGFIELD-OHIO.

AMERICAN FLORIST'S TRADE DIRECTORY

Price \$3.00, Postpaid

For Sale By

NATIONAL NURSERYMAN PUB. CO. Inc.,

HATBORO, - - - PA.

WANTED

WANTED FOREMAN and ASSISTANT FOREMAN.—In a nursery carrying a general line of stock, largely for retail trade. Very little propagating. Prime essential, ability to handle men.

ROSEDALE NURSERIES,

Tarrytown - - - N. Y.

WANTED—A practical working foreman. Please give experience, age, and if single or married. State salary expected, with references.

W. T. HOOD & CO.,
Richmond - Virginia.

Bobbink & Atkins

Nurserymen and Florists

RUTHERFORD, NEW JERSEY
Palms and General Decorative Plants, **INSPECT**
Conifers, Shade and Ornamental Trees **INVITED**

ASK FOR WHOLESALE CATALOGUE
Subscribers to "Nurserymen's Fund for Market Development."

The

Established 1841

Gardeners' Chronicle

is the Leading Horticultural Journal in the World

SUBSCRIPTION IN U.S.A., \$4.20
YEARLY POST FREE

Specimen Copy and Catalogue of Horticultural Books post free
on application to the publisher----

The Publishers, 41 Wellington St.
Covent Garden, LONDON, W.C.

Charles Detriche, Senior

ANGERS, FRANCE

Grower and Exporter of Fruit-Tree Stocks,
Forest Tree Seedlings, Rose Stocks, Shrubs,
Vines, and Conifers for Nursery Planting.

For all information as to Stocks, prices, terms, etc., address

Jackson & Perkins Co.
(SOLE AGENTS)
NEWARK, N. Y.

A Large Stock of

Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES
and SHRUBS. All stock clean and thrifty, the
best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO.

OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1919

Apple, 2 year, fine Ben Davis, Black Ben Davis, Gano, De-
licious, Lowry, Rome Beauty; Shade trees, extra fine, straight
bodies and extra rooted; one to two and one-half inches, Nor-
way, Silver, and Sugar Maple, Pin and Red Oak; Evergreens—
Norway and Hemlock Spruce, Deodar Cedars, Irish Junipers,
California Privet, 2, 3, and 4 year; Sugar Maple Seedlings, six
inches to ten feet.

Write us for prices.

SCARFF'S NURSERY

Headquarters for
Small Fruit Plants
1200 Acres "At it 25 Years"

Strawberries	Currants	Rhubarb
Raspberries	Gooseberries	Asparagus
Blackberries	Grape Vines	Horseradish
Dewberries	Privet	Hardwood Cuttings
Berberry	Spirea	Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants
for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE OHIO

We sell to THE TRADE only, and make a specialty of

OREGON CHAMPION GOOSEBERRY PERFECTION CURRANT CLEAN COAST GROWN SEEDLINGS

We also have growing for fall delivery a large assort-
ment of general nursery stock, including Fruit, Shade, and
Ornamental trees, Roses, Etc.

Head Quarters for Nursery Supplies.

Correspondence invited.

Portland Wholesale Nursery Co.

122½ Grand Avenue, Portland, Oregon

W. FROMOW & SONS

Rhododendrons, the cream of the Hardy
American varieties.

Andromeda floribunda, japonica, and speciosa,
bushy budded plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up
to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES

Surrey, - - - England

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by
all Horticultural traders. It is also taken by over 1000 of
the best Continental houses. Annual subscriptions to cover
cost of postage, \$1.00. Money orders payable at Lowd-
ham, Notts. As the H. A. is a purely trade medium appli-
cants should, with the subscription, send a copy of their
catalogue or other evidence that they belong to the nursery
or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS,
ENGLAND

TREES

Largest assortment in New Eng-
land. Evergreens, deciduous trees,
both common and rarer varieties.
Sturdy, choice stock that can be
depended upon. Send for catalog
and special trade prices.

The Bay State Nurseries
North Abington
Mass.

SHRUBS

This New England soil and cli-
mate produce fine sturdy shrubs.
Special trade prices. By the thous-
ands, hardy Native and Hybrid Rho-
dodendrons—transplanted and accli-
mated. Send your lists let us est.

When writing to Advertisers please mention the National Nurseryman.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and

PRINTED IN ANY MANNER that may be called for

Prices as low as First-Class Work and Unequalled Promptness in

Delivery will justify.

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

THE WAR IS OVER Nursery Business Will Boom Are You Prepared?

Plant largely of

ORNAMENTAL TREES, SHRUBS and VINES

Our price list of this stock for lining out in nursery rows will be ready in January. Write for copy.

THOMAS B. MEEHAN CO.

Wholesale Nurserymen

DRESHER,

PENNA.

Subscribers to "Nurserymen's Fund for Market Development."

Peach Pits

Prices on application

J. Van LINDLEY NURSERY CO.

Pomona, N. C.

Subscribers to Market Development Fund.



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the **Nursery, Florist, Seed Trade and Allied Industries**. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address

The Florists' Exchange, P. O. Box 100, Times Square Sta.

Good Nursery Stock Is Scarce

We offer for immediate acceptance

Apple trees:

- 500 Baldwin
- 2000 Ben Davis, 4-5 ft., 5-6 ft.
- 2000 Gano, 4-5 ft., 5-6 ft.
- 500 Fourth of July
- 5000 Jonathan, 3-4 ft., 4-5 ft.
- 1500 Northern Spy
- 3000 Red Astrachan,
3-4 ft., 4-5 ft., 5-6 ft.
- 1500 Ben Davis
- 1500 Gravenstein
- 8000 Grimes' Golden,
3-4 ft., 4-5 ft., 5-6 ft.
- 1500 R. I. Greening
- 1000 N. W. Greening, 3-4 ft., 4-5 ft.
- 1500 Winter Banana
- 2000 Winter Banana, 5-6 ft.

Peach trees:

- 2000 Ray, 4-5 and 5-6 ft.
- 8000 Belle of Ga., 3-4, 4-5, 5-6 ft.
- 5000 Belle of Ga., **June Buds**,
4, 6, 8, 12 inches

Pear trees:

- 4000 Keiffer, 4 yr., $\frac{3}{4}$ to $1\frac{1}{4}$ inch
- 1000 Bartlett, Laurence, Seckel,
Buerre, de Anjou and Clapp's

Grapes:

- 2000 Concord, 3 year
- 1000 Moore's Early

Norway Maples:

1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$ and 4 inch trees,
good roots and good tops.

Planes: Oriental

1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$ and 2 inch.

Poplars:

Lombardy,—1, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{2}$ inch.

Oaks:

2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$ inch.

Evergreens:

Kosters and Colorado Spruce
3-4 ft., 4-5 ft., 5-6 ft., 6-7 ft.

Norway Spruce

3-4 ft., 4-5 ft., 5-6 ft., 6-7 ft., 7-8 ft.

Strawberry Plants:

100,000 Klondike

100,000 Gandy

50,000 Progressive,

And twelve other standard varieties.

Hemlock Spruce:

2, 3, 4, 5 ft.

American Arborvitae:

2-3 ft., 3-4 ft., 4-5 ft., 5-6 ft.

Privet: California

$1\frac{1}{2}$, $2\frac{1}{2}$, $3\frac{1}{2}$, 4-5 ft.

Shrubs: Good assortment of leading kinds.

Barberry Thunbergii:

1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3 ft.

A full list of Shrubs, two year extra grade,
2-3, 3-4 and 4-5 ft.

ORDER PROMPTLY



HARRISONS' NURSERIES,

Berlin,

J. G. Harrison & Sons

Maryland

Subscribers to "Nurserymen's Fund for Market Development."

Subj. 2-10

21



THE NATIONAL NURSERYMAN



FEBRUARY 1919

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large assortment of high quality Nursery
Stock for the Wholesale Trade.
Fruit Trees, Small Fruits, Ornamental Trees,
Shrubs, Roses, and Vines.

A FINE LOT OF

Elm, American White, all sizes

Wanted — Hansen Hybrid Plums and Compass

Ask for Trade Lists. Write us about your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Progressive, Superb

and Peerless

...Everbearing...

Strawberry Plants

We can supply you fresh dug every
day. Healthy true-to-name, well root-
ed at attractive prices.

Address

The W. F. Allen Company

Salisbury, Maryland

To the Trade:

*Are you watching our
Bulletins?*

*They are money-makers
for you.*



C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

The Call

is for better stock at reasonable prices. Our organization of thirty years' standing enables us to give you both, together with prompt service.

Bulletin No. 2 was mailed to the trade January 18th. Did you get a copy? If not, write us. It will pay you to read over carefully our bulletins, which will be mailed about every two to three weeks during the balance of the season. Some lines are scarce now, others will be before Spring. J. & P. Preferred Stock can be had this season in good quantities as usual. Write us about those scarce, hard to get articles. If we haven't got them, we know where they can be located.

Jackson & Perkins Company Newark, - New York

We are subscribers to the Nurserymen's Market Development Fund.

The
Preferred
Stock

The
Preferred
Stock

PRICES SMASHED

on following

FIRST CLASS STOCK

AMERICAN ARBOR VITAE (transplanted and sheared specimens) 5-6 and 6-7 ft.

AMERICAN ARBOR VITAE (Smaller sizes—unsheared)

HEMLOCK (Transplanted and sheared specimens) 2-3; 3-4; 4-5; 5-6 ft.

PIN OAKS, 8-10 ft. Cal. 1½-2 in.
10-12 ft. " 2-2½ in.
12-14 ft. " 2½-3 in.

KALMIA LATIFOLIA, Fine Bushy Stock, 1-1½ ft.; 1½-2 ft.

HYDRANGEA P. G. 1½-2; 2-3; 3-4 ft.—Well branched.

FORSYTHIA, HONEYSUCKLE, SYRINGA, SPIREA
WEIGELIA, PERENNIALS, WILLOWS, ETC.

POPLARS for lining out

" LOMBARDY 3-4; 4-5; 5-6 ft.
" CAROLINA 3-4; 4-5 ft.

FRUIT TREES—Apples in ½ and ⅝ in. grades.
Peaches in 9-16 grade.

Pleased to Quote on small quantities or car load lots.

THE BARNES BROS. NURSERY CO.

Yalesville, Conn.

Box E.

L.R. TAYLOR & SONS

TOPEKA - - - KANSAS

FOR SPRING 1919

A fine lot of—

Apple Seedlings
Kieffer Pear Seedlings
Japan Pear Seedlings
Forest Tree Seedlings

also

A Large Assortment of Two and Three Year

Apple Trees
Forest Trees, Shrubs, Etc.

Stock is in cellar and can be shipped promptly

SATISFIED

Whenever a man is satisfied: when he feels he wants nothing more and nothing better; when tomorrow has no rosier hue than today and all the yesterdays, why he's plumb dead. He's ready for the wooden pajamas and pall-bearers and the "gates ajar" that "Say It With Flowers."

We don't want to disturb any satisfied folks; we seek the unsatisfied, the Nurserymen here and yonder who want something better when they buy stock for filling their orders; those who think maybe they ought to be getting something more in Quality and in Value and in Service than they have been getting.

We want to do more and more for our present Customers and to add to that list. We always try to stay a little bit dissatisfied ourselves; it makes us strive harder.

If you, Sir, aren't absolutely satisfied, write us about what you want or might want, this spring. We have 200 acres of new land in clean, thrifty, young Nursery Stock in a complete assortment. It ought to interest you. Tell us what you want; do it today.

PRINCETON NURSERIES

PRINCETON, - NEW JERSEY

January 31, 1919.

PAINESVILLE NURSERIES



~~~~~ ~~~~~ "Ye Early Bird"

The birdie might herald that early spring so optimistically prophesied for 1919; or he may illustrate the old proverb which explains who "gets the worm."

If an early spring is a surety, then we Nurserymen have got to get busy right away; or we won't be in shape to handle the stampede.



Judging from incoming reports, many lines of nursery stock are going to be scarce, and hard to locate.

Hence, Ye Wise Old Birds will get out,—even in February snow,—and scratch industriously for that proverbial "worm."

This is the Place
to look first,—and save time for
Fruit Trees **Small Fruits**

Nut Trees
Ornamental Stock:
Deciduous Trees, Evergreen Trees, Shrubs,
Field Grown Roses
Hardy Perennial Plants Greenhouse Plants and Bulbs
SEEDS

Definite Want Lists promptly quoted.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

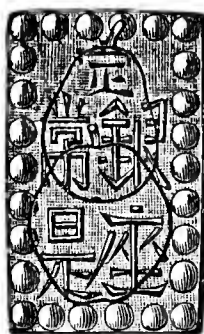
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

73 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

For Spring 1919

Our largest surplus consists of the following:

Montmorency, Richmond & Dye House $\frac{3}{4}$ in. up
Apple - - - 3 and 4 years

Ben Davis	Dr. Matthews
Benoni	Gano
Banana	McIntosh
Canada Red	Maiden Blush
Carson, (red, earlier than Yell. Trans.)	Stark
Ragans Red, (Black Ben Davis)	Wagoner

Plums - - - 11-16 and 5-8 in.
Lombard, Bradshaw, Shropshire.

Norway Maple, (20,000) - - up to 2 in.
These maples are straight and fine stock.

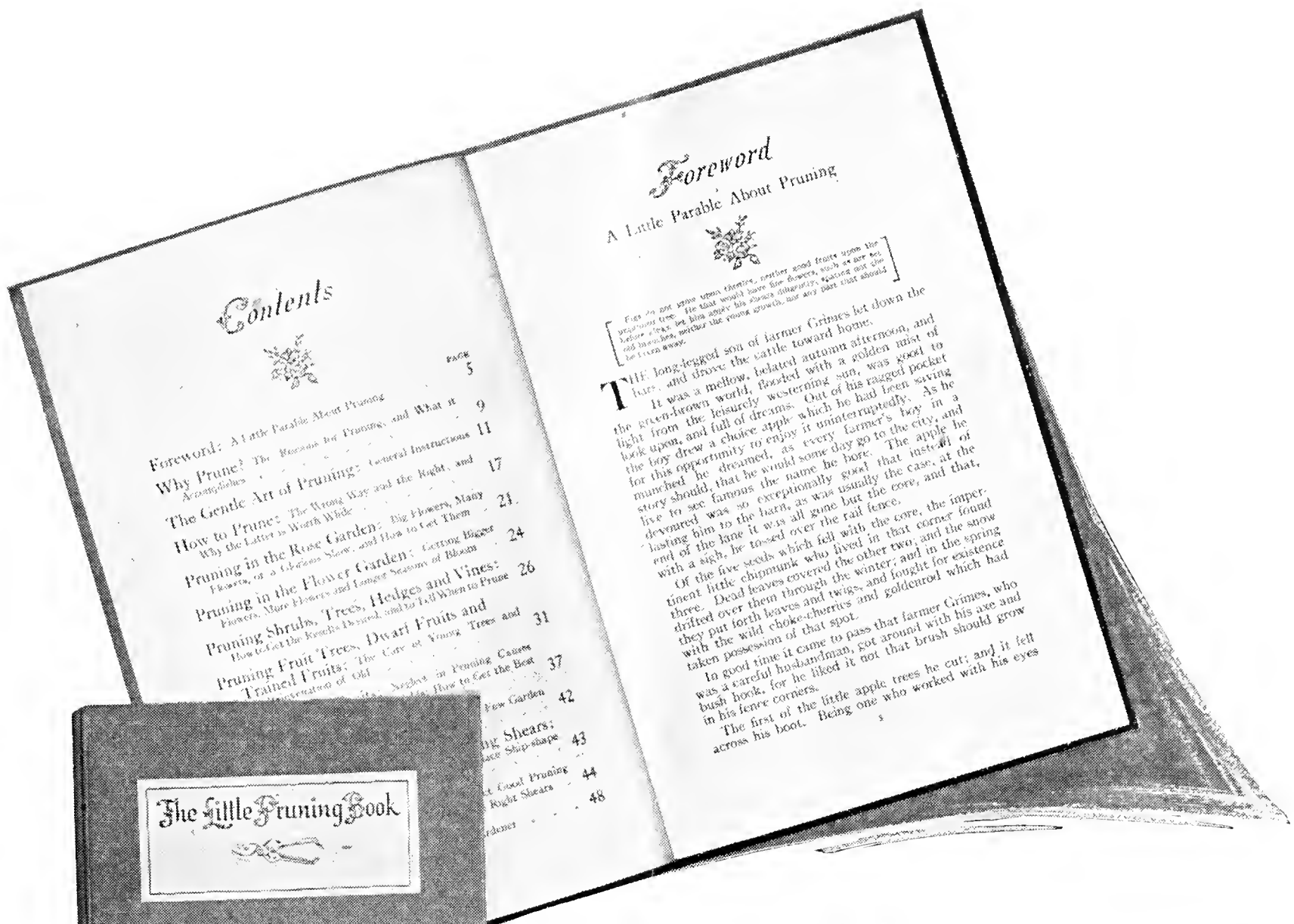
American Elm, (25,000) - - up to 2 $\frac{1}{2}$ in.

Spirea Van Houtti, 3 to 4, 4 to 5, 5 to 6 ft. bushy

Also a general assortment of small fruits,
shade and ornamental trees and plants.

C. M. Hobbs & Sons
Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."



This Book and the Plan Back of It Will Help You Sell Nursery Stock

This book is designed to help you by helping your customers. It explains the art of pruning in everyday language, and illustrates the principal points. It tells how, when and where to prune for vigorous and healthy growth. It's clear and concise.

Our Selling Plan Involves You

We've a selling plan that will pay you big. A cooperative plan whereby The Little Pruning Book reaches your customers through you, at an ultimate profit to yourself. It is selling at 50c in bookstores.

Let us send you a copy free. We will also explain our plan in detail, after which you can decide what is best for your business. Write early—no obligation.

THE PECK, STOW & WILCOX COMPANY

Mfrs. Mechanics' Hand Tools, Tinsmiths' and Sheet Metal Workers Tools and Machines, Builders' and General Hardware.

Southington, Conn.

Cleveland, Ohio

Address correspondence to 2189 W. Third St., Cleveland, Ohio



PEXTO PRUNING SHEARS

When writing to Advertisers please mention the National Nurseryman.



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CESHIRE

...Connecticut...

1918 Peach Seed



We offer a surplus of
100 bushels of North Carolina Peach Pits
Crop 1918

At \$3.00 per 50 pounds
F. O. B. here



H. F. Hillenmeyer & Son
LEXINGTON, KY.

FAIRFIELD NURSERIES FRUIT AND SEED FARMS

I have sold all the stock I will have this Spring, but this Summer I will be ready to book orders for Fall, 1919 and Spring 1920 delivery.

The war is over and good times are ahead. No more guns or ammunition will be needed, but you will want more of my Grape Vines, Scarlet and Crimson clover and Cow-Peas than ever before.

Keep me in mind.

CHAS. M. PETERS

P. O. Address Salisbury, Wicomico County, Maryland.
Long Distance 'Phone and telegraph, Salisbury, Maryland.

We are now ready to quote lowest prices on
**FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.
Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by
The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

HAVE YOU SEEN
AND EXAMINED THE QUALITY
AND FINISH OF OUR

**Rawhide Brand of Shipping
Tags and Tree Labels**

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.
West Chester, Pennsylvania

ROSE STOCK

Be independent grow your own ROSE STOCKS for budding or grafting. Those using ROSA MULTIFLORA JAPONICA STOCK prefer it to Manetti. We offer for immediate delivery New Crop unhulled Seed.

Write for prices.

95 Chambers St.

McHUTCHISON & COMPANY

New York, N. Y.

Ornamental Nursery Stock

TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS PLANTS

Large assortment. Long list of varieties and sizes

Get our New Trade Catalogue,—ready now.

Fall price list out of date.

Thomas B. Meehan Co.

WHOLESALE NURSEYMEN,

DRESHER

PA.

CORNUS FLORIDA

Transplanted and Collected Stock, All Sizes

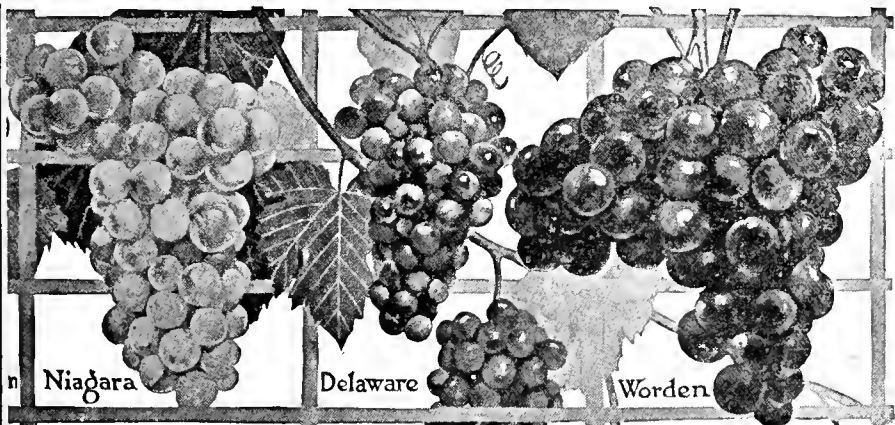
Write for Prices

WESTBURY NURSERY CO.

Clarence E. Pine, Prop.

P. O. Box 134

WESTBURY, N. Y.



T. S. HUBBARD CO.

Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting

Established 1866

Send for Catalogue

We have more of the following fruit trees than we will need for our retail trade the coming spring. If interested, please write for prices and a copy of our Surplus List:

APPLES

Alb. Pippin
Alexander
Baldwin
Bellefleur
Ben Davis
Car. Red June
Cornell's Fancy
Dela. Winter
Dickinson
Dominie
Duchess of Old.
Ey. Colton
Ey. Harvest
Ey. Ripe
Ey. Strawberry
Fallawater
Fall Pippin
Gano
Golden Sweet
Greenville
Grimes Golden
Hub. Nonsuch
Jefferis
Jonathan
King
Lady
McIntosh Red
No. Spy

Nyack Pippin
Ohio Nonpareil
Paragon (or Mam. Black
Twig)
Pawaukee
Rambo
Red Astrachan
Red Beitigheimer
R. I. Greening
Roman Stem
Rome Beauty
Smith's Cider
Spitzenburg
Stark
Starr
Strode's Bghm.
Summer Pearmain
Summer Rambo
Sutton's Beauty
Townsend
Twenty Ounce
Wagoner
White Ohio Pippin
Winter Banana
W. S. Paradise
Wolf River
York Imperial

PEARS

Bartlett
Beurre Clairgeau
Beurre d'Anjou
Belle Lucrative
Butter
Clapp's Fav.
Doyenne d'Ete
Duchess d'Ang.
Howell

Idaho
Keiffer
L. B. de Jersey
Manning's Eliz.
Osband's Summer
Roosevelt
Rossney
Sheldon
Dana's Hovey

1000 Houghton Gooseberries, No. 1

3000 Downing Gooseberries, No. 1

HOOPES, BROS. & THOMAS COMPANY

The West Chester Nurseries

West Chester, Pa.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Spring 1919

250,000 Cal. Privets in grades 2 and 3 yr.

500,000 Asparagus, 2 and 3 yr., Asst.

Barberry Thun., 18-24 in. and 2-3 ft.

Lombardy Poplars in grades 6 to 16 ft.

Oriental Planes in grades 6 to 12 ft.

Tulip Poplars, 6-8 ft.

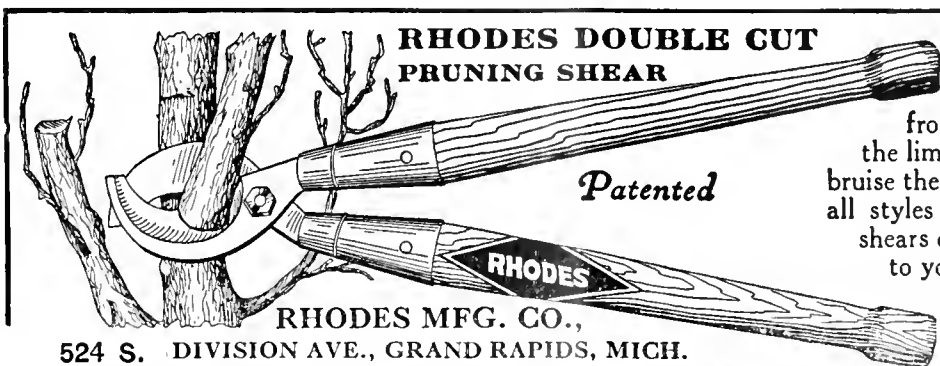
Horse Chestnuts in grades 7 to 12 ft.

Catalpa Speo in grades 8 to 12 ft.

Butter Nuts 4 to 8 ft., in grades.

Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft.,
Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft.
and 4-5 ft., Hydrangeas P. G. 18-24 in. Write for Prices.



RHODES MFG. CO.,

524 S. DIVISION AVE., GRAND RAPIDS, MICH.

THE only
pruner

made that cuts
from both sides of
the limb and does not
bruise the bark. Made in
all styles and sizes. All
shears delivered free
to your door.

Write for
circular and
prices.

When writing to Advertisers please mention the National Nurseryman.

J. H. Skinner & Co.

Topeka, - Kansas



Japan Pear Seedlings.

Russian Apricot Seedlings.

Forest Tree Seedlings—Catalpa, Maple, and Locust.

Fruit Trees—Apple, Cherry, Kieffer Pear, Peach and Plum.

Rhubarb, Divided Roots, True Myatt's Linneaus.

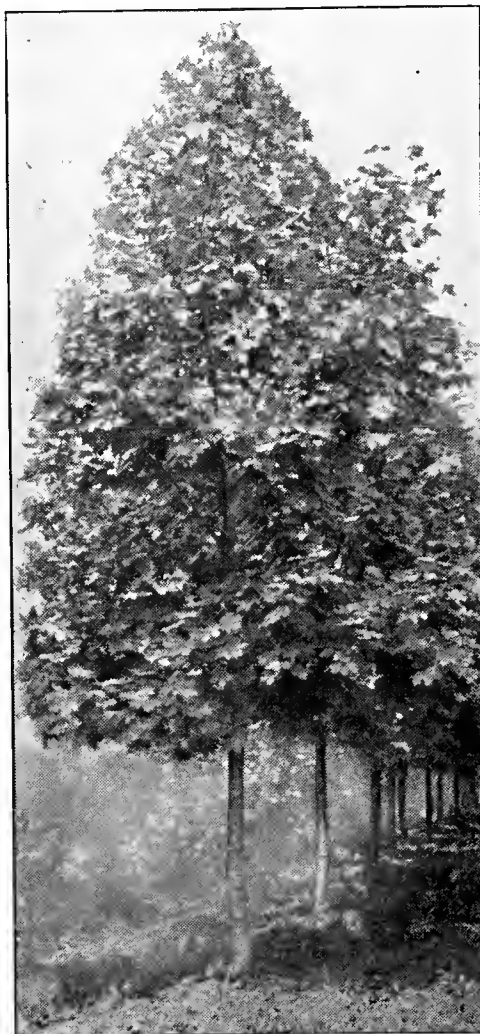
Grapes

Shade Trees

Flowering Shrubs

Paeonias

Straight Trunks, Good Heads



is a four-word description of our Norway Maples. Add two more, *Good Roots*, and you have the whole story. You can't get better trees anywhere nor at any price.

We ship by motor-truck to points within 50 miles of New York City. To more remote points we ship by freight, and have no difficulty in securing cars and prompt attention by the railroad.

We can dig at almost any time, and will ship trees when instructed. Shall we book your order?

Swan River Nurseries, Patchogue, New York

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

We are pleased to offer for Spring or Fall:

CHERRY, 2 year X X 1 inch up, also $\frac{3}{4}$, $\frac{5}{8}$ and lighter grades.

CHERRY, One year $1\frac{1}{16}$ up, $\frac{5}{8}$ & $\frac{1}{2}$ to $\frac{5}{8}$

Our Blocks of Cherry are largest to be found in U. S.

We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment.

Grafted Hardy Northern Pecans.

Car Lots a specialty, also fair assortment of Ornamentals.

Subscribers to "Nurserymen's Fund for Market Development."

Hill's Evergreens

We are headquarters for Everything in the Evergreen line, and with few exceptions have our usual full supply, but some things are scarce and getting scarcer every day. Owing to lack of imports, demand is brisk, and shrewd Nurserymen are covering their requirements early.

Nurserymen—Send us your list of wants in young Evergreens for lining out. Also Deciduous Trees, Shrubs and Vines. Our Propagation Department is one of the largest and most complete in America, and feel sure we can save you money and give complete satisfaction.

Dealers—Let us take care of your wants in Windbreak, Hedge and Ornamental Evergreens. Send in your list for pricing now, while assortment is complete.



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

You can save Time and Money

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street

Rochester, - - New York

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERYSTOCK

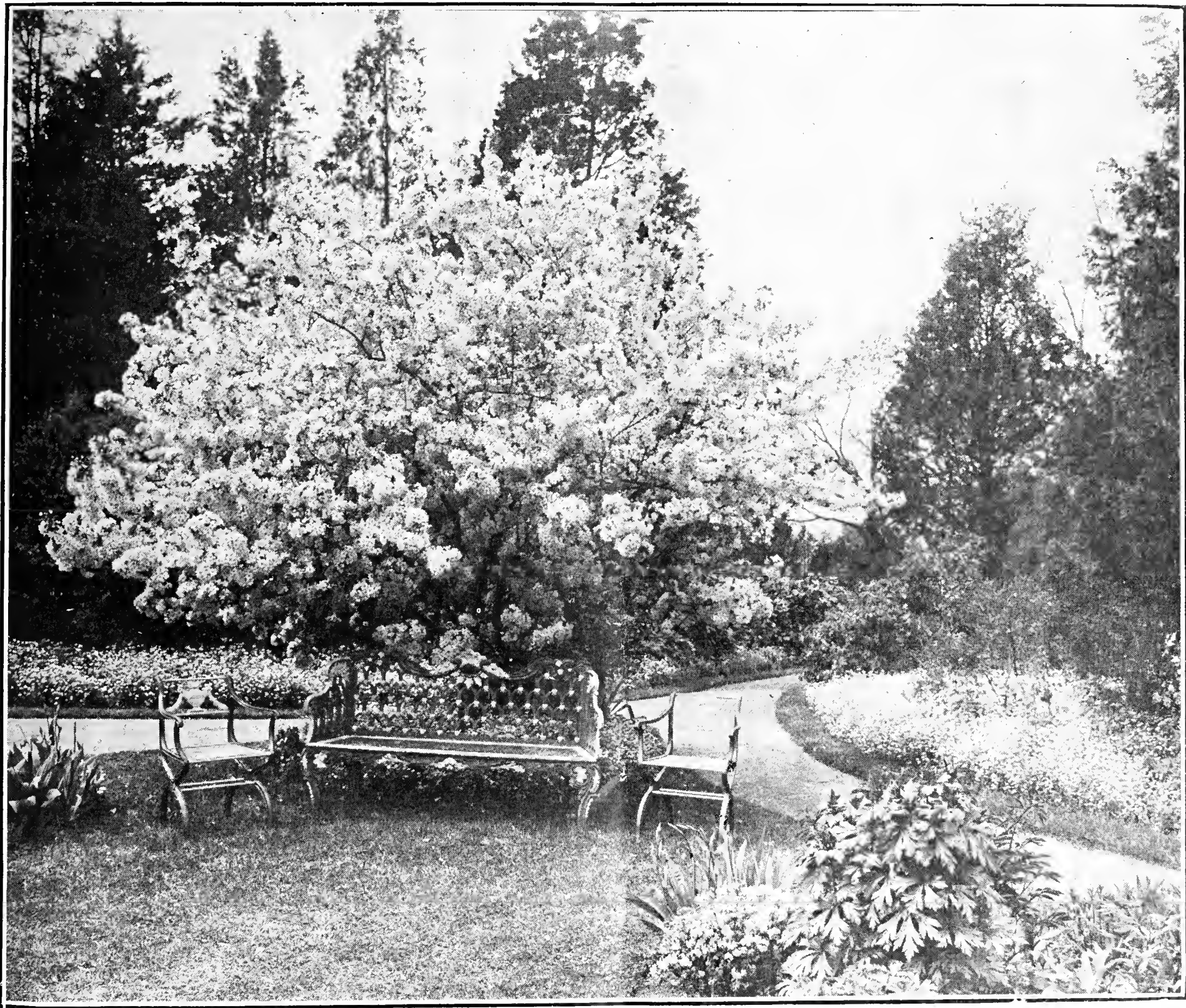
The National Nurseryman Publishing Co., Incorporated

Vol. XXVII.

HATBORO, PENNA. FEBRUARY, 1919

No. 2

Flowering Crabs



Pyrus pulcherrima, Scheideckeri

AN OLD apple orchard in full bloom ranks high as an object of beauty, yet the apple tree or any of the fruit trees are rarely considered from the artistic point of view when planting around the home, especially on the smaller places.

On the large estates, with a master landscape man in

charge, an old orchard receives full consideration from the artistic standpoint, and is usually highly valued for the beauty it adds to the general scheme.

In spite of the pruning and the artificial way in which the crab and apple trees are raised, they invariably have an artistic outline, rarely straight, yet always pleasing,

and a standing protest against the too common idea that a tree should be straight in trunk and uniform in outline, even if the nature of the tree is to be the contrary. A vigorous tree, true to its type, is always more beautiful than one which owes its symmetry to the skill of the gardener.

From a horticultural point of view, beautiful as fruit trees are when in flower, the crabs that have been long cultivated for the sake of the bloom are more so. The Oriental peoples seemed to have appreciated this long before we did, as evidenced by the world renowned flowering cherries and crabs of Japan and China. Most of the beautiful varieties to be seen in American gardens seem to have originated there.

We have one at least of American origin and American stock, of which we may be justly proud, *Pyrus ionensis*, Bechtel's Double Flowering Crab. This originated from Prairie or Western Crab Apple, and is truly a gem among flowering trees.

The subject of our illustration is a fine piece of *Pyrus pulcherrima*, *Scheideckeri*. This variety originated at Scheidecker's Nursery at Munich, from seeds of *P. pulcherina*. It has semi-double very light pink flowers and very floriferous as illustrated in the picture.

The foregoing and *Pyrus Halliana*, *Parkmanni*, Parkman's Flowering Crab, and *Pyrus spectabilis*, are the ones most often met with in nurserymen's catalogues, but there are numerous others just as worthy of attention. The flowering crabs offer a very fertile field for the hybridist and improver of plants. The potential possibilities are enormous.

There are a great number of species and varieties which are extremely variable, almost defying the botanist to classify them. Many of them have handsome persistent fruit, which adds greatly to their value as ornamental plants. It is a group of plants that should suggest itself to the nurserymen of the middle West.

There are possibilities for a nursery that will specialize on them, to become famous.

MEMORIAL TREES

Camp Dix as a permanent army post will have a living tree as a memorial for every New Jersey boy who has died in the service, under plans announced this week by the committee on camp beautification, appointed by Major General Hugh L. Scott.

The committee, of which General Secretary Frank Wandel, of the Knights of Columbus, is chairman, announces that the plan will be submitted soon to every municipality in New Jersey. Cities, boroughs and townships will be asked to present a tree for every man from their respective municipality who has died while in the service. The committee will select the varieties of trees to be planted, so that it can carry out a universal scheme of beautification.

Arbor day probably will be selected as a memorial occasion when these trees will be planted.

WILLIAM FLEMER, JR.

William Flemer, Jr., of the F. & F. Nurseries, Springfield, New Jersey, has been awarded the Croix de Geurre for bravery under intense bombardment.

It is a far cry from the Baby Ramblers, cradle roll of the National Nurserymen's Association, to the French War Cross bestowed for bravery in action but that was our "Bill" Flemmer's jump in two years.

Mr. Flemer enlisted in June, 1917, going to Camp Crane at Allentown, Pa. In August the same year he sailed for France on the S. S. Baltic, landing at St. Nazaire.

Went into action with the French Army, October 18th, remaining with them until the armistice was signed. He was in the Ambulance Corps, Battalion 23 and right in the thick of the fighting. Four of the boys from the same unit were killed and three taken prisoners. The last letters from Mr. Flemmer were received January 9th, sent from Muhlhausen, Germany.

When writing some of his experiences he says:—

"We have seen our share of the fighting this year. It started with the time the Boche first broke through last spring. Our division was a part of the French army that was brought up to stem the tide. We took up our position just outside of Noyon and had some darn hard work, believe me.

"There we stayed six weeks and then went out to rest and be ready for any other emergency. It came the last week in May, when Fritz again broke through on the Aisne, making a quick march in the direction of Soissons. We took up our position about two miles from that city. Here the old division proved its mettle again, for it stopped the enemy and was like a stone in their way holding and doing what would seem like the impossible in order that the reserves might come up and things be arranged that the enemy advance be checked. Those were the worst days I've ever experienced. We had four days and nights of a regular Hades.

"It couldn't have lasted much longer because there was nothing left of the division. Attack and counter-attack followed one another in quick succession. First the line went one way and then another. They would push us back and you would think they had things their way, but then, somehow, almost miraculously, those Frenchmen would come back and simply push Fritz back again.

"At night the sky was red with the burning villages and flashes of guns. If the racket stopped for a bit the night bombers overhead could be heard coming and going.

"One night I was making a trip with an ambulance and on the way back had to pass through Crepy en Valoise. There was a big ammunition dump outside of the town along the railroad. An enemy bomber had dropped a bomb on it and when I came along in the flivver, it was burning and cracking in great style. It lit things up like day and the devil being still overhead to see if anything came along must have spotted me, because just as I got into town—bang! went a bomb in the building behind. Three or four more came in quick succession, but I got nothing but a couple of holes in the old bus and heard the

shell fragments hit all around me. You can bet I did some tall stepping, gave her all the gas she'd take and just tore on out into the open country.

"Will tell you briefly the rest of our work. From Soissons we went to a town near Paris, where we had a week's rest and then had a nice long trip to the Argonne Woods, to the right of Verdun.

"Here we stayed some six weeks and were there when the great offensive of July 14 broke. You know how the Boches were surprised and the tide turned so quickly, bringing victory. From Argonne we went up to the Somme, when we were a part of the French army that relieved the Canadians after their quick advance in the early part of August. We went in at Hattencourt and advanced past the Somme to the Hindenburg line outside of St. Quentin.

"Leaving the Somme we went to Pierrefonds, a town near Compiègne. Following two or three weeks' rest we again left for the front, going in at La Fere, made an advance of about thirty kilometers and were relieved three days before the fighting ceased. During the last action, I received the Croix de Guerre 'for bravery under intense bombardment.'

"The papers tell us the States went wild with the news of the signing of the armistice and so I guess you, too, have been having your share of fun. Over here, of course, we felt gay but it's not a marker to what we'll feel when that old boat starts for home. That's the big question now, and every day brings a fresh rumor. I guess we will be here three more months anyway, even longer.

"We are now on repose and no one seems to know just what we will do or where we will go. Of course, we will stay with our French division until they are disorganized, but that will take three months. Where we will go in the meantime I don't know, but I think it might be Alsace. We are now at a little town called Rantigny, halfway between Clermont and Creil.

"The last place we were in action was on the River Serre near La Fere, and we came out about two or three days before the hostilities ceased. From the front we went back to a small town near Chaung. There we stayed a week or more and finally moved down here.

"I left the section on permission after we left the lines and joined them here a few days back. The permission I spent in Aix le Bains and Paris."

SUGGESTED SLOGANS FOR THE MARKET DEVELOPEMENT MOVEMENT

Let Trees and Shrubs Tell It.

The Trees and Shrubs Told it to Me.

Trees and Shrubs Will Do It When Nothing Else Will.

If the old place looks forsaken,

And needs some good advice,

Messrs. Trees and Shrubs will give it

At the lowest market price.

CHARLES E. BROYLES.

Beauty is Wealth.

REV. C. S. HARRISON.

COURT AWARDS DAMAGES FOR THE DESTRUCTION OF TREES

Joseph R. Connell, of Haverford, recovered a verdict for \$7280 in the United States District Court for the damages done in cutting down giant oak and fruit trees by Western Union employees.

"When the company got through, my place looked like devastated Belgium," declared Mr. Connell during his testimony. The telegraph company contended that with its right of way for construction of poles and telegraph wires it had the right to cut down the trees for public benefit and convenience. Mr. Connell denied this and brought suit.

It was testified a white oak tree, fifty feet in height and 100 years old, was felled by the telegraph employees, and that they felled about sixty others, including black heart cherry, tulip, poplars, red maples and dogwood and sassafras.

The plaintiff declared he paid \$114,000 for the property, but when the defendant got through with its chopping it had depreciated \$5000 in value. The trees were valued at \$1500, and the jury's verdict represented the full amount of the claim, with interest.—*Philadelphia Public Ledger*.

SIGMUND TARNOK BUYS FRUITLAND NURSERIES P. J. BERCKMANS COMPANY, INC.

The nursery and landscape interests of the P. J. Berekmans Company, Inc., has been sold to Sigmund Tarnok, who has also purchased the home and farm of R. C. Berekmans, lying just across the road from the Fruitland Nurseries, by which name the Berekmans place has long been known.

Mr. Tarnok is a native of Switzerland, but has been in America about five years and is well versed in this line of work in the South. He married a daughter of Mr. J. B. Reeves, of Macon, and he has been employed by the Central City for the past year as landscape artist. He is a graduate of Stuttgart University and of School of Landscape Gardening and Architecture at Budapest.

Mr. Tarnok has also leased the nursery lands of R. C., L. A. and P. J. A. Berekmans, Jr., with option to buy. The new owner has retained the complete field and office force of the concern and it will be conducted as heretofore by experienced employees.

The change of ownership and management of the Fruitland Nurseries comes after over half a century of progress and success, the concern now being known throughout the world. The retiring owners bespeak for Mr. Tarnok the highest consideration of the public and they are confident he will demonstrate his ability to the satisfaction of the old and new patrons of the nurseries.

The sale does not in any way affect the property of the Berekmans Brothers, at Mayfield, where they have one of the finest orchards and farms in the South. In addition to devoting their time to this property Messrs. L. A. Berekmans and P. J. A. Berekmans, Jr., will do special work as consulting horticulturists, and they have already been retained as experts by several of the largest orchard interests in the South, both being famous as experts in this line.

Observations by the Optimist

Comment Serious and Otherwise, on Trade Topics

EXCLUSION

JUST by way of prediction, let it be set down that the few short-sighted growers who applaud the impending prohibition of imports, may possibly have another guess coming. A monopoly is always appreciated by the "party of the first part," but one seldom lasts long. In this country, we grow some lines that Holland grows too; there are other things we cannot grow supplied us by Holland and on which the buyers have always made a profit. The profit now accrues to those temporarily in control of our home supplies at monopoly prices. Let us bear this in mind: that we can shut out Holland stock, but we can't shut out Holland nurserymen! Many of them have been growers for the American trade exclusively. What are they going to do now? Europe will not be able to use much of their stock for years to come. Is it unreasonable to suppose that what has already occurred to us has already occurred to them? If they cannot grow stock for the American market in Holland, why, they can come here and grow it. Besides, that would eliminate the tariff difference. They will begin to arrive before long; they will seek employment in your nurseries; you will be glad to employ them; they will accustom themselves to your methods and after you have educated them in the knowledge of how to compete with you, they will proceed to do that very thing. They are expert growers, trained from boyhood, far more efficient than the average American propagator, thrifty and economical. Not being able to reproduce their Holland soil and climate, they will not be able to grow the Standard Roses, Azaleas and Rhododendrons, but they will grow what you and I are now growing and they will beat us both in quality and price. This is not set down in any feeling of alarm; our market offers opportunity for more good growers; it is just by way of pointing out that prohibition will simply transfer competition from Holland to our own shores. Mohamet will come to the Mountain.

LABOR

It is apparent that relief from the embarrassing labor situation is close at hand. That is, the supply will be increased. Munition plants have closed down, war factories are shut, two million soldiers are on their way home and when all these disengaged men return to their normal employments, there will be plenty of labor. But the question of supply itself is more important only than the cost of it. Wages are high or low according to the cost of living and it doesn't look like that is going to come down soon. We are going to have to feed all Europe until the next harvest and possibly for a year beyond that; it is one of our peace burdens; and that is not going to make our own living expenses one bit less. How, then, can we expect our labor to cost us less? It won't. Competition for jobs would seem to compel lower wages. Now, when a man earns three dollars a day and spends two-seventy-five of it, he is happy; but when he gets two-

fifty and it costs two-seventy-five to live, it means strikes and riots and sabotage. Many trade organizations are already declaring for maintenance of the present wage-scale even after it could be reduced. It would be against public policy to permit wages to fall below the cost of living. The problem may be handled by employers in the manner indicated and again it may be that conditions may force the Government to fix a minimum wage-scale. The war has upset so many conditions that we need not expect to be able to get back where we were four years ago; we can't take up things where we dropped them; we have to begin all over again; peace brings problems far more serious than those of the war. We nurserymen might just as well make up our minds that for years to come our labor expense will be just as much as it is today; and sixty per cent of all our expense is for labor. If our pay-rolls were of their usual length, at present wages, just what would the balance-sheet show? We cannot make permanent our present neglect of the many things we have let pass; when we get our usual number of men back, how much shall we make at present labor cost? The laborers who became soldiers are coming back with new ideas; they are not going to be content except with better conditions than they left. The labor here has been employed at abnormally high wages, but neither are they going to resume quietly a lower standard of living. "*Labor omnia vincit.*" We used to write it in our copy-books at school; we write it in our pay-rolls now. Our prices are less than they were ten years ago, because cost of production has more than doubled. Figure it out.

SHORTAGE? NO: MORE DEMAND

Did you read President Mayhew's letter about fruit-trees? All other reports indicate what is referred to as a shortage of nearly all kinds of fruit-trees and small fruits; and it is very general—down South, out West, North and East. There has been a great demand from all over the country. Isn't it rather easy to account for it? Look at the way fruit has been advertised as a good thing to grow for food. We were told that we could use it at home and ship the less perishable food to Europe. And the American people are wonderfully responsive; they are intelligent and they read and talk and think; they take hold of suggestions that sound reasonable. We nurserymen have had the benefit of the biggest sort of free advertising campaign, only we didn't realize it and didn't connect up with it. This big demand for fruit-trees is the direct result of it. There was Hoover, the Food Administrator, who kept hammering on the idea of fruit as food; and there was Houston, in the Department of Agriculture, talking fruit in his speeches and putting the idea into department bulletins. Did you notice his use of the Des Moines Resolution in one? And there was McAdoo, Director General of Transportation, putting nursery stock on the priority list, food-producing material, to be moved first! We had three big Government departments at

Washington at work on Market Development for us. And this big demand for fruit-trees is the direct result of what they said and did.

It shouldn't have been difficult to include ornamentals in the planting idea; it would be the most natural thing in the world. Why, the Secretary of War helped us there, for the Government took the position that the boys needed trees and plants and hedges and flowers around the cantonments; that they contributed to their pleasure and stimulated their morale. And all the while we were trying our best to persuade ourselves and our customers that nursery stock was one of the non-essentials and that maybe it wasn't exactly patriotic to plant things. But the Government gave country-wide circulation to a different idea. That is why we are having right now an unusual and country-wide demand for stock. It shows what publicity can accomplish.

THERE ARE OTHERS

The manager of one of the trade organizations wrote this comment in "Printers' Ink" on his bunch who are cooperating in publicity and other things:

"These fellows have a fine thing and they deserve to make a success of it and they undoubtedly will, but right here and now I want to confess in advance that it isn't so much the advertising that is going to do it—though you may be sure we are going to take credit for it. The thing that really brought these boys together and is going to make "good dogs" of them is a morbid sense of fear and suspicion and cut-throat competition. The association as it now stands is a wonder and so far the work of holding them in line is like herding jack-rabbits without a fence around the herd."

Do you recognize any of the symptoms?

ROUND TRIPS

I heard a good story the other day. Aunt Mary Wells is one of the few "befoh de wah" darkies left in a little Kentucky town. Recently she was discussing with her employer the merry-go-round that was running up on the corner.

"Nawsuh, Mr. Malcolm," she said, "nawsuh, I don't ride on none o' dem things. Why, Mr. Malcolm, Ise seed some o' these here fool niggers git on dat thing an' ride as much as a dollar's wuth and git off at the very same place they gits on at; an' I sez to em, 'Now you done spent yo money, nigger, whah yo' bin?'"

I wonder if we nurserymen aren't taking a good many "round trips" and landing again at the identical point from which we started? I mean, with our various trade organizations. They are so numerous that we have to card-index them. And mostly they seem to be unable or is it possible?—unwilling to do the things that brought them into existence. It is a sort of general merry-go-round. Some gentle pessimist said that the nursery business is not a business at all—but a habit.

There are two things that every head of a family needs and ought to have. And yet they are the two hardest things to sell him: Life Insurance and Nursery Stock. They are rarely bought; they are usually sold. There's a difference.

Criticism is like Charity, for charity covers a multitude of sins; and unlike charity in this: that Charity begins at home.

OLD STOCK, CUT-BACK AND TRANSPLANTED

An unwise substitution maketh a sad nurseryman.

Payments deferred maketh the bank-book sick.

A rose by any other name might have to be replaced.

The spring cellar-surplus-count goeth before destruction and a haughty field-estimate before a fall.

A perverse man scattereth abroad surplus-lists.

Special offers are human; to stick to the price-list is divine.

A good name for a variety is rather to be chosen than great merit.

Train up a child in the way he should go and when he is older he will not become a nurseryman.

He that planteth Ben Davis shall not harvest Baldwins; and the rod of his wrath shall fall.

Foolishness is bound up in the heart of many a catalogue and plate-book.

Rob not the poor but soak the rich sucker.

Remove not the ancient labels which thy fathers have set.

"Improper packing" covers a multitude of complaints.

A profit is never without honor save in the nursery business.

Thou shalt take heed of thy neighbor; his advertising and his service; his goods and his grades; his prices and his practice.

And thou shalt watch thyself and thy business just a little bit more carefully than thy neighbor's.

On these two, hang all the Loss and the Profits.

And now, bretheren,—Let us spray.

THE OPTIMIST.

ANNUAL CONVENTION OF THE NEW ENGLAND NURSERYMEN'S ASSOCIATION

The annual meeting of the New England Nurserymen's Association was held at Boston, January 28th and 29th with headquarters at the New American House instead of Hotel Bellevue as heretofore.

It is the aim of the association to accomplish something and make the organization worth while.

One of the features of the program was an illustrated lecture by J. Horace McFarland, Harrisburg, Pa., and President of the American Civic Association, to which the public was invited.

Mr. McFarland speaking under the title "How can we make New England more Fruitful and more Beautiful?" aimed to bring out the thought that "the modern tendency has been to make our gardens chromos instead of pictures, each being an imitation of another rather than a development of individuality. Moreover, there has not been that fine thought of combination in effect which ought to be a part of the consideration. It seems to me that a garden which does not include trees, shrubs, perennials, dahlias, gladiolus and cannas, for example, in the broad effect in mind, is likely to be weak. The customer is frequently quite ignorant and he needs suggestion and help from the informed standpoint. If he gets it he will buy more stuff, and that is the basis of market development."

A subject of great interest at the present time was discussed by Mr. William W. Colton, city forester of Newton, Mass. His paper entitled "Living Monuments for Our Soldiers" urged the advisability of planting trees as memorials and advise the proper sorts to plant.

A Promising Cherry Orchard



A close-up view of the individual tree—see view of the orchard on page 47

We are indebted to the Neosho Nurseries Company, Neosho, Mo., for the photograph herewith reproduced.

There are 800 Montmorency cherry trees in the orchard, planted the spring of 1917. Photographed October 1918.

There were only four trees lost out of this planting, which speaks well for the quality of the stock and care in handling.

The memory of the severity of last winter is still fresh and is proof of the hardiness of the Montmorency cherry.

The close-up photograph of an individual tree in the orchard gives a good idea of the sturdy, vigorous growth the trees have made and according to the rule a caliper of two inches.

ENDORSES "THE OPTIMIST"

Editor National Nurseryman,
Flourtown, Pa.

Dear Sir:—

We have just read with much interest the views of the "Optimist" on the subject of Market Development in the January issue of the National Nurseryman. It was a splendid article. It shows a comprehensive study of the matters most vitally interesting to nurserymen just at this time.

Especially do we want to commend the "Optimist" on the stand he takes on the subject of "getting together and pulling together," referring to the grower and the retailer. For too many years have the grower and retailer fought at cross purposes with each other. Things that are of interest to the grower are of interest to the retailer. Matters that affect the retailer's business affect that of the grower also. When we are able to effect a "getting together" of the grower and retailer, then and only then are we going to be able to put the nursery business where it belongs. If the growers and distributors will get together and establish prices that will allow a profit to both parties concerned this will serve to do away with haphazard prices. For too long have the prices of nursery stock been governed by the immediate demand or supply. Of course, this necessarily affects prices to some extent, but any business man knows that in order for his business to be a paying proposition, the price he gets for his product must be governed by the expenditure necessary to produce this product. How much longer are nurserymen going to be so unbusinesslike as to trust to Providence, fate, or ordinary every day luck to make money out of his business. Under present conditions there are some years when a nurseryman can make good money, especially if he happens to have in good supply some particular item that is in good demand but not very plentiful among nurserymen in general. That is all right for that particular year, but the very next year his surplus may consist mainly of items that have been grown in considerable quantity by other nurserymen, and in consequence will have to sell cheap. So what assurance does the nurseryman have of a profitable business? Very little, to be sure, as long as prices vary according to the supply or demand.

Now the finished product, be it a fruit tree, shade tree, shrub or vine, is worth a certain price to the man who plants it, regardless of the supply of this particular article, or the demand. If it is worth one dollar, measured in terms of beauty, comfort, and added value to his property, to a man to have a certain kind of tree planted on his lawn, he should pay no less than one dollar for that tree regardless of whether there are a million just such trees on the market or a thousand. Consequently, the prices the grower gets for his stock should never be based upon anything except the cost of the product and the value of the product to the ultimate consumer. When prices are established according to the above nurserymen won't be forced to sell their products far below their real value and thus lose money just because there happens to be an unusually large supply of that particular item at that particular time. The nurseryman should realize that his

product is worth a certain amount to the consumer, and that there is a field for disposing of it if he can only discover that field. And right there is where the Market Development should come in, by opening up new fields to enable the grower to dispose of his surplus without having to take a loss.

And now to sum up what the Market Development should include: First and foremost, it should bring about established prices based on the cost of the product that will allow a profit to both the grower and the retailer. Second, it should open up new fields of business, and when these two things have been accomplished other matters will be of minor importance. Several other things may, and probably will be included in the plan of Market Development, but these two, I would say, should be the chief end and aim. Or in other words, to make of the nursery business a sure enough business proposition, instead of the haphazard, hit-or-miss business it has been in the past.

AN ALABAMA NURSERYMAN.

THE PROBLEM OF STOCKS FOR AMERICAN FRUIT GROWERS

By B. T. Galloway, From the Bulletin No. 143 U. S. Dept. of Agriculture, Bureau of Plant Introduction.

For a good many years the Office of Foreign Seed and Plant Introduction of the Department of Agriculture has been engaged in bringing in plant material that gave promise of value for stocks. Special attention has been given to fruit stocks, particularly stocks for the apple, pear, peach, apricot and plum. Since 1898 something over 400 types of pears have been introduced and disseminated. Many types of peach and plum have also been introduced and have been placed in the hands of specialists and others for work in connection with securing disease and insect resistance, soil and climatic adaptability, and congeniality.

Recently the Federal Horticultural Board announced a proposed quarantine on nursery stock and other plants and seeds imported into the United States. On and after June 1, 1919, all plants and plant materials will be excluded except two groups one of which will be admitted without restrictions and regulations and the other with restrictions and regulations. Fruits, vegetables, cereals, and other plant products imported for medicinal, food, or manufacturing purposes; and field, flower, and vegetable seed will have unrestricted entry,—unless on account of some dangerous disease or insect, when there may be issued either a temporary or permanent quarantine. It is conceivable for example, that there might be a disease affecting the lemon in a foreign country which would make it necessary to quarantine against that country. The Federal Horticultural Board has issued a number of these special quarantines and will no doubt continue to issue them in cases of emergency.

PLANTS ADMITTED UNDER RESTRICTIONS.

The plants and plant materials that will be allowed to come in under restrictions and regulations are lily bulbs, lily of the valley, narcissus, hyacinths, tulips, and crocus. In case any of these materials are packed in sand or soil, the sand or soil must previously be sterilized by heat in a manner satisfactory to the Board. Seedling fruit stocks, cuttings, scions, and buds of fruits for propagating will also be admitted under regulations, together with rose stocks for propagation. All nuts, including palm seeds, will be admitted, as well as seeds of fruit, forest, ornamental, and shade trees, together with seeds of deciduous and evergreen ornamental shrubs, and seeds of hardy perennial plants.

PLANTS EXCLUDED

The groups that will be automatically excluded, include such things as budded and grafted fruit trees; grape vines; bush fruits; forest and ornamental deciduous trees; ornamental deciduous shrubs; coniferous trees, including pines; evergreen trees and shrubs, including the broad leaf types; and a consid-

erable list of what is commonly known as field-grown florist's stock.

ADMISSION OF NEW AND RARE PLANTS AND NOVELTIES.

The Board makes provision for the importation, through the Office of Foreign Seed and Plant Introduction in the Department of Agriculture, of new plants, seeds, bulbs, etc., for experimental and scientific purposes and for propagation in this country. The Board also makes provision for the importation in limited numbers of novelties from all parts of the world under safeguards that will assure their freedom from dangerous diseases and insects.

The machinery for this work is already organized in the Office of Foreign Seed and Plant Introduction; and, while it will not be practicable to undertake large commercial importations for private firms, it will be within the province of the Office to handle the necessary limited shipments of novelties that may be brought in for propagation here. While lily bulbs, narcissus, hyacinths, and related bulbs, fruit stocks, and rose stocks will be admitted under regulations, it will doubtless be the policy of the Federal Horticultural Board to exclude these plant materials when it would seem assured that the commercial needs of the country can be met by home grown supplies.

THE PROBLEM OF STOCKS.

The Office of Foreign Seed and Plant Introduction is primarily interested in the broader constructive problems of stock production in this country, and in the securing of types of stocks for the principal fruit crops and for some of our more important ornamentals like the rose. It recognizes that the whole question of stocks is a broad and complex one and that much work will need to be done to secure light on the many questions involved. We are beginning to appreciate more and more that our future successful fruit culture is intimately associated with the problem of stocks. With the exception of the grape, no far-reaching studies have been made on stocks in this or any other country. We have followed certain empirical practices in the past, but as competition becomes greater and the demand for the highest grades of fruits and plant products increases, we must know more of the actual relation of stocks to quality of product, to the length of life of the tree or plant, to adaptability to soil and climate, to resistance to disease and insect attacks.

The question of stocks would seem to resolve itself into two main groups of problems: (1) The practicability of producing in this country the millions of ordinary apple, pear, plum, and cherry stocks which hitherto have been largely secured abroad. (2) The systematic study of stocks with a view to their improvement and their better adaptability to the wide variety of conditions and needs that exist here and are likely to develop in the future as our great fruit industries become more complex. It is imperative that if our fruit industries are to be maintained, there must be full supplies of the usual or ordinary stocks. The securing of special stocks is a long time process and will have to proceed slowly and carefully, building up cautiously on the foundations we already have and must maintain.

Pear growing is not one of our paramount fruit industries, yet it is safe to say with no other fruit is there a greater proportion of trees lost each year which must be replaced if normal production is to be maintained. Fire blight is the chief cause of the loss of pear trees in this country, and while it is highly desirable to find stocks, or to develop stocks, that may in a measure prevent some of the losses to pear growers from fire blight, the pressing need is to maintain the supplies of French and Japanese seedlings required to keep the number of trees up to normal. If stocks are to be reproduced in this country to take the place of those hitherto secured abroad, it would seem proper that efforts should be made by the Government to aid those who are anxious to know where the work can best be done and how it may be done to the best advantage. The problems involved are so complex that private interests can not well handle them.

Briefly then, the chief problems connected with the production of commercial stocks of apple, pear, plum, cherry, and rose are to find regions and soils in this country where such stocks may be commercially grown and to demonstrate on a commercial scale that such stocks are equal to—or better than—those grown abroad. We use the word "commercial" here in the sense that the procedure throughout should be such that the results secured may be satisfactorily applied by the trade. Such work as is proposed will need the help and cooperation of the trade. Nurserymen have not been idle in the past in this field. As recently pointed out by Mr. William Pitkin and others, nurserymen have tried for years to develop the business of producing fruit tree seedlings but, with the exception of the apple, no material progress has been made. It has been further pointed out that many nurserymen prefer to import French apple seedlings and pay more for them, believing that thereby they would secure better blocks of better trees.

Correlated with the problem of commercial stock production, is

that of securing seeds for stocks. There are no contemplated restrictions, so far as we are aware, on the importation of fruit seeds. The restrictions brought about by war conditions, and the general situation with respect to seed for stocks, show the need for developing our own home supplies. This is a long time proposition, as there are few recognized sources of supply here, such as exist in Europe.

DEFINITIONS OF THE PLANTS AND PLANT MATERIALS ADMITTED UNDER RESTRICTIONS

1. LILY BULBS.—Herbaceous perennials with scaly bulbs, belonging to the genus *Lilium*, and consisting of numerous species and varieties.

2. LILY OF THE VALLEY.—Horizontal rootstocks, "pips," and clumps (without soil), of *Convallaria majalis*.

3. NARCISSUS.—Hardy bulbs of three species, *Narcissus Pseudo-narcissus* (the common daffodil), *N. bulbocodium* (hoop-petticoat daffodil), and *N. tazetta* (polyanthus narcissus), represented by numerous varieties.

4. HYACINTH.—Hardy spring-flowering liliaceous bulbs of many varieties derived chiefly from five species—namely, *Hyacinthus orientalis*, *H. amethystinus*, *H. azureus*, *H. lineatus*, and *H. fastigiatus*. Used for outside planting and forcing under glass.

5. TULIP.—Hardy and forcing bulbs of the genus *Tulipa*, family Liliaceae, imported chiefly from Holland.

6. CROCUS.—Spring-flowering and autumn-flowering plants, all members of the genus *Crocus*, with solid bulbs or corns, represented by numerous species and varieties.

7. FRUIT STOCKS (free stocks).—Seedlings or plants or parts of plants upon which a scion or bud may eventually be set. Carries neither grafts nor buds.

8. Cuttings.—Severed portions of plants used for propagating purposes by rooting in sand, soil, or other medium.

9. SCIONS.—Severed portions of plants which may be mechanically inserted on other plants (free stocks) for propagating purposes.

10. BUDS.—Severed leaf buds with bark and wood attached, used for propagating purposes.

11. ROSE STOCKS.—Seedlings or rooted plants of the genus *Rosa*, upon which cultivated varieties of the rose may be grafted or budded.

THE GARDEN MAGAZINE

Much, very much, could be said about the Garden Magazine as to its high quality as a horticultural magazine, the practical common sense of its reading matter, the artistic make-up of its pages but all these things need not be recorded as they are patent to everyone capable of judging. We are not particularly interested in throwing bouquets at the editors and publishers for fear they may become egotistical and charge the nurseryman more for advertising space. Still we should be ready to give honor where honor is due.

Apart from its value as an advertising medium for nursery products, it deserves all the credit it gets and possibly a little more for the work it is doing as an educational factor in the market development for the products of the nursery.

No one knows better than the retail nurseryman the cost of educating the public by means of catalogues and such literature that goes out of the nursery office.

It is true it is done with a selfish motive yet it invariably helps his competitor.

The same is true of the Garden Magazine, and while it may be true it is published as a commercial proposition, it will perhaps not hurt the management and will do the nurserymen good for the latter to recognize the splendid work this magazine is doing in preparing the ground, sowing the seed of interest in horticulture and so creating the demand for the nurserymen's products.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., February 1919

Subscribers to "Nurserymen's Fund for Market Development"

The whole subject of commissions is a
COMMISSIONS distasteful one to discuss but after all
it so ramifies nearly all business in
some form or other that it is foolish to ignore it. Like
tipping, nearly everyone wishes it could be done away
with, but are helpless, and keep on paying tribute.

Some commissions are perfectly equitable, proper and
just, while others are pernicious and criminal.

It requires a very fine discrimination to judge between
legal discounts in their various forms, rebates, bargains,
quantity rates, presents and endless forms of reciprocal
agreements, and those which are frowned upon as un-
moral.

Legality does not always prove the morality of a trans-
action, and very often influence and pull misused are
just as pernicious as an unlawful commission.

In our own particular trade it is very difficult to say
which is the higher grade of ethics, the nurseryman who
deliberately offers a discount or the one who uses his
influence to put a gardener in a position with the ex-
pectation that the gardener will reciprocate by placing
orders with him.

Both aim at an essential, namely, the gardener's good
will, as they recognize he has the power, if so minded, to
make or break that particular business connection.

Apart from the morality it is the unjust exaction from
the nurseryman that galls. Why should he, in addition
to competition, be called upon to purchase business, for
that is what it really amounts to, not only from gardeners,
but landscape architects and others. The lower prices
allowed the landscape architect who passes them on to
his client is really "trimming" the nurseryman to further
his own interests. Both should receive their remunera-
tion from their employer and not the nurseryman.

There may not be much wrong in allowing a small dis-
count to the man who is going to have the care of the
plants you sold. It is perhaps to his employer's interest
to encourage him to give the best results from the stock
but it lets down the bars to criminal robbery. It is only
a step to a larger order for the sake of the commission,
for which the gardener's employer has to pay and for
which he does not get adequate returns.

Custom will often make right out of a wrong. If the
employer, the buyer and the seller are all cognizant of
the discount, it may be a poor way of doing business, but
there is nothing wrong.

After everything has been said, and the subject
viewed from every angle, the only decision that can
be arrived at is that it is the nurseryman's own fault.

It is only when it is done under cover and to the detri-
ment of one of the parties does it become immoral.

The remedy is easily seen, let the nurserymen adopt a
uniform rule, publish it and stick to it and the trouble
largely vanishes.

If every commission paid was open and above board so
as to be just to everyone concerned, it would soon remove
the stigma and suspicion with which it is now associated.

Gardener A is employed by Mr. B. Business ethics
would frown upon him for receiving a discount on pur-
chases made for the man who pays him his salary, but
business ethics would likely reward him with a smile if
he made a few dollars by recommending the same nur-
seryman to Mr. C.

Like many other phases of this life, it is not what it
ought to be but what is that concerns us most and what
we are in contact with every day.

The nursery business has two separate phases, pro-
duction and distribution. Rightly or wrongly the dis-
counts have to be added to the overhead of the latter.

The over-anxious salesman, selling on commission,
may split it with the purchaser. It may be poor business
but few would question his right. He is injuring him-
self and cutting prices.

What is needed to reduce the unsavory giving of com-
missions to innocuous desuetude is an open business policy
based on common business sense to be adhered to by the
majority.

The greatest remedial measure against unmoral com-
missions would be their publication, but how to put such
a measure into effect is the great problem.

The all wise Creator in his infinite wisdom must
BUGS have considered all bugs necessary to round out
the plan of creation or they would not have been
here.

It is evident the entomologist, at least that portion con-
nected with the Government, think otherwise, and are
going to try and legislate them out of the country if it
is possible.

Only good bugs will be permitted to domicile them-
selves in these United States.

Even those native born indigena will have to be on
their good behaviour and function only according to the
approval of the Federal Horticultural Board.

The orchards will produce nothing but first grade
fruit, no scale, blight, mildew, nothing to spray for, just
go and gather the fruit which will be as good in the lazy

man's orchard as it is in that of those who work early and late for the best results.

No enterprise, persistence, education or effort will be necessary for there will be no bugs.

If this legislation works well we must agitate for some more to govern the weather, then we can sow and reap just when it suits us.

No pernicious bugs, from whence will come the spur to effort to grow better plants, trees and fruit than our competitor.

But why stop at the bugs? There are lots of people who come to the country who are harmful to its institutions and economical administration of its government. And who knows, if all communication with other countries was stopped, the influenza might have been kept away. The remedy is simple. Give the Federal Horticultural Board jurisdiction and they will stop all emigration.

Then there is the importation of animals, horses, cows, pigs, chickens. Is there not a very real and great danger that they will bring in some terrible epidemic that will sweep through the land in spite of the quarantine and watchfulness of the health boards, an ounce of prevention is worth a pound of cure.

But why stop at trying to prevent danger from other lands? We have lots of it right at home. Two terrible accidents recently on the railroads resulted in loss of life and property. Suggest stopping the trains from running to prevent such occurrences.

Fires also sometimes wipe out whole communities. Better have a law passed to have all fires extinguished afraid they will get beyond control.

This kind of reasoning appears very ridiculous but it is apparently the kind of logic that has resulted in the Plant Embargo.

Judging from the Horticultural press of Great Britain the nurserymen and florists and the trade in general seem to be going through the same experience as this country.

The following, clipped from the Horticultural Trade Journal, applies equally well in this country.

"We have had during 1918 not only a taste but a fairly big slice of the fare than officialdom has measured out to industry any commerce. Frequently in my notes I have dealt with various restrictions, orders, and handicaps. One treads on tender ground hereabouts. It would not be British to snarl and snivel at necessary restrictions. It is sometimes said to be injudicious to demur against Authority, even when grievances are both real and tiresome, whilst it has often been remarked that Government interference with business will be but temporary, and will be speedily relinquished. Signs are not wanting, however, that officialdom loves official control, and there is a deal of shaking and kicking to be done before the Trade can feel the freedom of its limbs."

QUITE A CONTRAST

A cablegram from Vice Consul Nasmith, Brussels, received January 10th, 1919 says:—

"The Belgian Government has just given notice that the following articles may be imported without licenses:

Horses, plants, trees, nursery stock, garden and forest seeds, seeds for fodder crops in sheaths or standing, etc., etc."

Quite a contrast to the action of our own government with its far reaching embargo which is to take effect June 1st, 1919.

PROTEST AGAINST THE HORTICULTURAL IMPORT PROHIBITION

By Henry A. Dreer.

You are, of course, familiar with the recent ruling of the Federal Horticultural Board at Washington which prohibits, after June 1, 1919, the importation of all plants and bulbs, in which the Nursery, Seed and Florist trade is interested, excepting the following few items: Lily bulbs, Lily of the Valley, Hyacinths, Tulips, Narcissus and Crocus—absolutely nothing else in the line of bulbs can be imported from any foreign country.

In the line of plants you may bring in fruit-tree stocks, seedlings, cuttings and scions of fruit trees, and you may import Manetti, Multiflora and Rugosa Rose stocks for budding or grafting but absolutely nothing else in the way of plants.

Do you realize how radical and far-reaching this embargo is, and how seriously it will affect, not only every importer, but every individual in the trade who handles bulbs, plants or cut flowers; from the largest importer down to the smallest grower, florist or dealer?

There will be no Azaleas, Rhododendrons, Spireas, Araucarias, Dracaenas or Boxwoods. Orchids will only be a memory, and there will be missing in our stores and in our gardens, hundreds of other varieties of plants and cut flowers on which heretofore we have depended upon European sources and which were profitable for the American grower to develop and were a source of revenue to the retailer.

Many of these subjects will never be produced in this country and such that, after years of preparation, may become developed here, will necessarily have to be sold at a price which will make them prohibitive to the average present purchaser of this class of stock.

One of the peculiar points in this ruling of the Federal Horticultural Board, which we are unable to harmonize with the Board's effort to prevent the risk of importing dangerous pests, is the fact that they consider it safe to import Manetti, Multiflora and Rugosa Roses for budding and grafting purposes but do not consider it safe to let these same roses come in with named varieties (such as Killarney, Ophelia, Radiance or other sorts) grafted or budded upon them. The root of the Manetti, the Multiflora or the Rugosa remains the same, but the top will be that of the named variety, i. e. Killarney, Ophelia, Radiance or whatever the variety may be and it is absolutely impossible for an insect to be imported on the one and not on the other, so, why should these Rose-stocks be permitted to come in (in which only a few growers who graft or bud roses are interested or benefitted) and the named varieties, in which practically everyone who grows and sells plants is interested, be excluded?

Furthermore, if it is safe to import a Lily bulb, a Lily of the Valley, a Hyacinth, Tulip, Narcissus or Crocus, what infestation affects the hundreds of other bulbs that are excluded that justifies the Board to say, "You are not to bring in a Dahlia, Tuberous-rooted Begonia, Gloxinia, Gladiolus, Spanish Iris, Oxalis, Seilla, Snowdrop, Crown Imperial or other equally harmless bulb?"

There have been two meetings of the Federal Horticultural Board at Washington, D. C., during the past six

months—one of them on May 28, the other on October 18, to which all interested in this subject were invited to be present and to offer protests if any. At both meetings the Nurserymen's Association, as well as the Legislative Committee of the Society of American Florists and Ornamental Horticulturists, and a number of individual growers were present, all of whom gave valuable data for the proper enlightenment of said Federal Horticultural Board. They were most cordially received, attentively and patiently listened to—even thanked—for the information given, but that is all.

Why all this information which was given in good faith has been turned down, the Federal Horticultural Board does not tell us; they simply say: "After June 1, 1919, you cannot import anything but the few items in bulbs, fruit-tree stocks and roses for grafting purposes noted above."

Whether the action taken by the Federal Horticultural

where, before the war, upwards of one thousand nurseries were operated; a large part of whose products was exported to the United States. We have sent our kin and friends to bleed on the battlefields of devastated Belgium to help to return these people to freedom, and, now that this has been accomplished and they are preparing to take up their customary vocations in anticipation of supporting themselves as they have always bountifully done before, and they come to us and offer us their horticultural specialties, as they did before the war (the majority of which we cannot procure elsewhere or which we cannot produce ourselves) we will have to hold our hands up in horror and say:

"While we have cheerfully helped to feed and clothe you and while our soldiers have died on the battlefield to give you your freedom, we cannot buy your Azaleas, Bay Trees, Norfolk Island Pines, Rhododendrons, Palms, your Begonias, Gloxinias and



800 Montmorency Cherry Trees in this orchard and only four lost out of this planting

Board is in accordance with the law as enacted by Congress, which created their power, we do not feel competent to pass upon, but we are satisfied, however, and confident that it was not intended as the spirit of this Act, that the policies and destinies of the entire Horticultural Trade, with its millions of dollars of investment, should be placed in the hands of five (5) members of the Department of Agriculture.

Your Congressman has the means of finding this out, and if you will appeal to him for aid in the matter we are certain that he will investigate and see to it that such power, if it exists, is changed so that the Horticultural Trade will be placed in the high position to which it is entitled.

Finally: For more than four years our country has cheerfully assisted and helped to keep a great portion of the Belgian population from starving; this embraces the great plant-growing districts around Ghent and Bruges,

other specialties (as badly as we need them) because there is a Federal Horticultural Board of five men in Washington who, while they have no record that you have in the past sent us any insect pests that have been dangerous to our country, they fear that there may be such pests hidden away in your country and that these might, in leaf or soil, escape the rigid examination which your entomologists give them before you ship them, and that they might even escape the careful examination which our State and Federal Departments give them on their arrival here, and thus become a serious menace. While you continue to have our sympathy, we cannot think of purchasing your horticultural products!"

Think it over, and if you want to assist to place Horticulture in its proper position, write to your Congressman at once. He will stand by what is right if you submit the facts properly to him.

Trade Acceptances

Henry T. Moon, Glenwood Nurseries, Morrisville, Pa., speaking at the Pennsylvania Nurserymen's Association strongly urged a more general use of Trade Acceptances among nurserymen as they would do much towards improving the financial transactions of the trade.

Fred H. Oulcott, Manager Commercial Department, Acceptance Corporation, New York, writing in the Public Ledger, says about them:

"It would almost seem as though the Federal Reserve system came as a providential aid to this country to see us through the great war. As is always the case where the foundation is sound, the building proceeded rapidly and it was a short time indeed until the benefits of the new system became apparent. Then the common sense and common judgment commenced to advocate it until now we wonder how we did without it so long.

"With the coming of the Federal Reserve bank came the campaign to extend the use of trade acceptances. Other countries had found them good; this country hardly knew them. Of course, in our dealings with foreign countries they were in constant use because the foreigners were thoroughly accustomed to them and sought the benefits arising from their use in their exchanges. Then a few of our more progressive business men began to use them. But it took a great deal of effort to obtain even a fair start for the trade acceptances, because in spite of our national boast that we are not hidebound by custom and tradition and that we are always ready to 'try anything once,' merchants did not like the idea of departing from their usual methods of settlement.

"It soon became apparent that an organized effort must be made if the trade acceptance was to become popular. Meetings were held all over the country under the auspices of the various credit men's associations, bankers' associations, boards of trade, chambers of commerce and other similar organizations.

ACCORDED PREFERENTIAL RATE

"Then money became scarce and credits were restricted on account of the war activities. Bank loans were shortened and contracted. It became more and more necessary to finance commercial transactions by the most efficient and up-to-date methods. The Federal Reserve banks were authorized to offer a preferential discount rate on trade acceptances offered for rediscount, and banks found in acceptances a means of keeping their assets very liquid and at the same time supplying their customers with credits and funds.

"The retailer realized at once the benefit of having his customer agree to pay on a fixed day of settlement, instead of having an open account, the payment of which depended upon the humor of the debtor, and which frequently ran four, five and sometimes six months. In the East trade acceptances were mostly used by merchants who sold staples in quantities or by those who gave long credit terms.

"The decision of the New York Clearing House to

handle acceptances payable in New York in the same manner as checks had a stimulating effect, particularly on the banks, who gained greater confidence in the instrument that received this recognition by the clearing house.

Realizing the great importance to business of the movement and the rapidity of its growth, it seemed necessary to have some central organization to guide and regulate the general practices and customs that should be followed in the use of this new credit instrument. Accordingly the American Trade Acceptance Council was formed, consisting of representatives from the American Bankers' Association, National Association of Credit Men and the Chamber of Commerce of the United States.

"It is obvious that when a merchant changes his selling terms from the old open account basis to the new system and obtains trade acceptances from his customers he places upon the bankers the work that was formerly done by his own collection department. The merchant has been accustomed to personally correspond with his various debtors, and unless the bankers collect, remit and advise promptly a very bad impression is given to the merchant.

"Therefore, if acceptances are to be popularized, bankers must see to it that the machinery of collection works rapidly and accurately and that information comes through promptly, particularly if there is delay of any kind or for any reason whatsoever.

WIDENING USE INDICATED

"Now, regarding the return to peace conditions. It has been demonstrated that the trade acceptance is a good thing. It has had a practical test. Facilities are increasing right along, making it easier to handle or dispose of acceptances and perfecting the collecting machinery. It is only a question of time when trade acceptances will have a wide market and will be bought and sold at low rates of discount.

Firms of high credit and large capital are at present less inclined to give trade acceptances than the smaller firms, which of necessity must consider 'terms' when making their purchases. The large firms seem to prefer to pay cash and obtain all the advantages arising therefrom. However, the old practice of cash discount will never be entirely abolished, but will always continue as one method of settlement. Trade acceptances are reducing many business evils, such as taking of overtime, the unwarranted return of merchandise and other similar matters. In this respect they have been of great service.

"In the agricultural sections and wherever the livelihood of the population is derived from the crops or products of a season, it is quite likely that the acceptance will be used between the merchant and the retail customer. By their use the merchant finds it easier to carry his customer over the 'between season' periods, and the customer, knowing that his acceptance is held by the bank and not by the merchant, makes much greater effort to

settle it on due date than he would if he owed an open account to a merchant with whom he is friendly.

"The experience with trade acceptances has so far been very gratifying, and as it is sound in principle it is bound to grow in popularity."

PERTAINING TO THE PLANT EMBARGO

Dear Sir:—

For some months I have read with close attention in the National Nurseryman and other trade papers, many articles and letters all arguing and protesting against Ordinance No. 37 of the Federal Horticultural Board.

These arguments have run all the way from "Poor bleeding Belgium" to "making the world safe for democracy," and the terrible hardship that is to be inflicted upon our congressmen by denying them Bay tree porch ornaments and Orchid corsages for their wives.

Not one of these writers to my mind has presented the subject in other than a partisan manner. The National Nurseryman in particular in its January issue about goes the limit in this respect in referring to the pests and diseases that inspired ordinance No. 37 as imaginary foes. With the history of the San Jose scale, chestnut blight, blister rust, etc., before him, I fail to see how he has any justification for such a statement. He also states that "insect and plant life are interdependent and left to themselves the balance is maintained." This statement if it is to apply to the whole subject should include fungous diseases.

Will he be good enough to advise his readers how long in his opinion it will take the San Jose scale and the fruit industry to become balanced without the help of scalecide and lime sulphur.

The fact that there has been discovered a chestnut that is apparently immune from the blight should prove of absorbing interest to owners of woodlands throughout the East, who have lost unnumbered millions by this scourge. The progeny of this lone specimen may during the course of the next few hundred years balance up matters.

If the protestors are sure of the justness and rightness of their stand would it not be better to present some real arguments along analytical lines that will appeal to reason rather than to prejudice.

I suggest a few points for discussion that may possibly help not only the trade but the House and the Senate to acquire a more comprehensive view of the matters involved.

1. Has the country as a whole during the last forty years, benefitted or suffered loss by the importation of nursery stock?

2. Is it possible to detect all diseases and pests at the time of importation or before the material has been distributed to the public?

3. Is the personnel of the inspection service maintained by the various States competent, and efficient?

4. If not, can it be made so and how?

5. The same questions in regard to the inspection service employed by the foreign countries from which we import.

I am no lover of bureaucratic methods or regulation by

fiat, nor can I stomach the clothing with cant a plain business proposition.

Whether it is nominated in the regulations of its department or not, the Federal Horticultural Board in common decency and justice owe to the trade a clear concise statement of their reasons for putting into effect this drastic ordinance and an explanation of its apparent inconsistencies.

The Horticultural trade owes to its self a dignified judicial reasoned exposition of its claims. If it can not give this it is certainly in the rum class.

Very truly yours,

GARFIELD WILLIAMSON.

THE ANNUAL MEETING OF THE PENNSYLVANIA NURSERYMEN'S ASSOCIATION

The annual meeting of the Pennsylvania Nurserymen's Association was held January 15 at the Hotel Adelphi, Philadelphia, Pa.

Mr. Adolf Muller, President of the Association was in the chair.

There was a very good attendance, the nursery interests of the state being well represented.

The plant embargo came in for a good deal of attention and the meeting went on record as being unanimously opposed to it. Mr. Clark, of the Henry A. Dreer Company, spoke on the Plant Embargo and convinced every one at the meeting that Regulation No. 37 of the Federal Horticultural Board was discriminatory, obnoxious and unworkable to accomplish what it intended.

The theoretical foolishness of the Plant Embargo was brought out in the animated discussion on the subject.

Questions were asked why shiploads of fertilizer were allowed to come to this country fairly alive with insects? Whereas plants from localities where every possible means were taken to insure their being clean are to be forbidden entry.

What steps had been taken to insure the earth being brought over as ballast and dumped along the Jersey and Pennsylvania coasts being free from pests?

It is unfortunate some of the government entomologists were not on hand to enlighten the nurserymen on these subjects.

The subject of prices was brought up and showed nurserymen had begun to realize the necessity of looking closely after cost of production and its effect on the selling prices, all seemed to agree that higher prices were necessary unless they wanted to go out of business.

Among the firms represented were:

Rakestraw and Pyle, Kennet Square, Pa.

Andorra Nurseries, Chestnut Hill, Pa.

Adolf Muller, Norristown, Pa.

Henry A. Dreer Co., Philadelphia, Pa.

William H. Moon Co., Morrisville, Pa.

Cheltenham Nurseries, Cheltenham, Pa.

Thomas B. Meehan Co., Dresher, Pa.

Bertrand H. Farr, Wyomissing, Pa.

A. E. Wohlert, Narberth, Pa.

Conard & Jones, West Grove, Pa.

Root's Nurseries, Manheim, Pa.

Henry F. Michell Co., Philadelphia, Pa.

Joseph W. Thomas, King of Prussia, Pa.

AN OPINION ON THE PLANT EXCLUSION LAW

By Theo. Foulk

The exclusion law ordered effective June 1, 1919 is special and class legislation, made under the cloak of protecting America from injurious insects that might be imported with plants, but really to put money in the pockets of some seedling and rose growers. It is prompted by selfishness and self interest without consideration of the major part of our people, and is intended, and is expected to enable the few mentioned to gain more of this world's goods. It will not be effective in fulfilling its excuse for being, inasmuch as the insects sought to be excluded are already in our country. If there was danger in importations of nursery stock it would be urgent that the ruling be effective at once in order that importations could be stopped now. That it is intended specifically to benefit rose growers in particular is demonstrated by its allowing importation of rose stocks and excluding the grafted or budded ones—One is not more immune from insects than is the other.

We hear much about "making the world safe for Democracy" but this can be accomplished only by making justice the law of life and by according to other people the same conditions and opportunities that we ourselves enjoy. Non-intercourse is not the way to induce a spirit of brotherhood and good will, and without this spirit the world is hardly safe for anybody or anything. Selfishness is the major sin of the world, and nothing should be done to foster it. This exclusion law does that and to that extent will cause dissatisfaction and unrest, and in particular in our own country, for sooner or later most of our people will discover that they are injured in the pocket nerve, that sensitive organism that perhaps more than aught else controls men's actions.

From an aesthetic standpoint it is most unwise to make more difficult of satisfaction the aspirations of our people to adorn and beautify their home surroundings. To spread the gospel of beauty is akin almost to spreading the gospel of righteousness. Neither can be accomplished by class legislation that makes unfair, because unequal men's opportunities. The law in question will be ineffective in accomplishing the object at which it is ostensibly aimed because, speaking in language all can understand it is "locking the door after the horse is stolen." In some degree it disappoints the hope inherent in all men for saner and juster conditions in the world.

FOR SALE**QUITTING BUSINESS**

FOR SALE—1 Opener (Graft planter) last a life time **Price \$75**
1 Ilgenfritz firmer, good as new

Other tools too numerous to mention priced upon application.

E. H. GRAVES - - LEE'S SUMMIT, MO.

**NURSERY
FOR SALE**

Located in Western Canada Prairies where market is unlimited. Well established and with valuable mother stock of hardy plants. Large orders for spring shipment already closed. For sale as a going concern. Inquiries invited.

BOX 60, CARE NATIONAL NURSERYMAN.

U. S. Trees grown by US.

Small Evergreen Trees
for Forest-planting and lining-out.

**We raise our own trees
from seed.**

Write for our price list.

Keene Forestry Association

KEENE, - - - N. H.

**WANTED**

WANTED—A practical working foreman. Please give experience, age, and if single or married. State salary expected, with references.

W. T. HOOD & CO.,
Richmond - Virginia.

WANTED—Twenty thousand St. Regis Everbearing Raspberry plants. Quote price, with quantity and samples.

THE TEMPLIN-CROCKETT-BRADLEY CO.
CLEVELAND, OHIO

HELP WANTED—Nurseryman capable of handling men and producing results. A good opportunity for the right man.

THE WAGNER PARK NURSERY CO.,
Sidney, Ohio.

The Nurserymen's Association of Holland

Cabled as Follows:--

SAILINGS	will be resumed direct from Holland, via Holland America Line.
FREIGHT RATES	nursery stock (regular box) 25 florins for 40 cu. ft. roses, perennials Young conifers (without balls) 35 florins Deciduous Trees 22.50 florins Trees packed in bales (12 ft.) 20.00 florins
INSURANCE	less than 1%
LICENSES	we have received the necessary U. S. Import Licenses.
THE UNDERSIGNED,	members of the Holland Nurserymen's Association of Holland state that on account of previous delay of the mails they would advise ordering by CABLE the principal varieties you desire.

REPRESENTING
QUALITY
RELIABILITY
and
CONSCIENTIOUSNESS

J. Blaauw & Co., Boskoop, Holland
J. Bulk & Co., Boskoop, Holland
Ebbinge & Van Groos, Boskoop, Holland
L. J. Endtz & Co., Boskoop, Holland
Felix & Dykhuis, Boskoop, Holland
F. J. Grootendorst & Sons, Boskoop, Holland
Johan H. Hardyzer, Boskoop, Holland
Kallen & Lunneman, Boskoop, Holland
Harry Koolbergen, Boskoop, Holland
Koster & Company, Boskoop, Holland
M. Koster & Sons, Boskoop, Holland
Michelsen & Co., Naarden, Holland
H. den Ouden & Son, Boskoop, Holland
Ottolander & Hooftman, Boskoop, Holland
K. Rosbergen & Son, Boskoop, Holland
B. Ruys, Dedeemsvaart, Holland
Sliedrecht & Co., Boskoop, Holland
Smith Union Nurseries, Boskoop, Holland
Van Gelderen & Co., Boskoop, Holland
Van Heiningen Bros. & Co., Boskoop, Holland
C. Van Kleef & Co., Boskoop, Holland

TO NURSERYMEN

SHOULD we import Nursery Stock from Holland for Spring Delivery?

OF COURSE WE SHOULD!

WHY?

Because the following inducements are offered:

SAILINGS	will be resumed direct from Holland, via Holland America Line.		
FREIGHT	lower	PRICES	reasonable
INSURANCE	lower	QUALITY	good

When writing to Advertisers please mention the National Nurseryman.

AMERICAN FLORIST'S TRADE DIRECTORY

Price \$3.00, Postpaid

For Sale By
NATIONAL NURSEYMAN PUB. CO. Inc.,
HATBORO, - - - PA.

Southern Nurserymen Attention

There will be no Raffia for budding this Spring.
What will you use?

Try "BUDTIE"

10,000 lbs. sold to nurserymen last year.

Write for samples and prices.

Thomas B. Meehan Co.
INTRODUCERS OF "BUDTIE"

DRESHER

PENNA.

20,000 DEPENDABLE

TWO-YEAR NO. 1 CONCORD GRAPE VINES
ready for shipment

Stock is A No. 1 and will satisfy the most particular
customer. Get busy and write.

R. B. GRIFFITH

FREDONIA, N. Y.

FOR SALE

Peach Trees — Kieffer Pear — Apple Trees.

W. T. MITCHELL & SON,
Beverly, Ohio.

CALL'S NURSERIES

PERRY - - OHIO

We have the following stock in surplus:

5000	Berberis thunbergii	18-24 inches up
2000	Hydrangea arborescens	18-24 inches
5000	"	paniculata grandiflora 2-3 ft.
3000	"	" " 3-4 ft.
1000	"	" " Trees 3-5 ft.
5000	Spirea Van Houttei	18-24 inches
5000	"	" " 2-3 ft.
2500	"	" " 3-4 ft.
1000	"	" " 4-5 ft.

AMERICAN ELM 2 inches up. One of the finest
blocks in this country.

Many other items which will interest you.

The above stock is as good as can be grown. Graded to the
highest standard and will be priced right to any Nurseryman
interested.

ORNAMENTAL TREES

Acer Platanoides—6 to 8 ft., 8 to 10 ft., 1½ in., 1¾ in.
Acer Rubrum—6 to 8 ft., 8 to 10 ft., 1½ in.
Acer Saccharinum—6 to 8 ft., 8 to 10 ft., 2½ in., 3 in.
Aesculus Hippocastanum—2 in., 2½ in., 3 in.
Betula Alba Laciniata—6 to 8 ft., 8 to 10 ft., 1½ in.
Catalpa Bungei—4 to 6 ft., stem.
Platanus Orientalis—6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 1½ in.
Quercus Rubra—6 to 8 ft., 8 to 10 ft., 1½ in.
Salix Dolerosa—8 to 10 ft.
Ulmus Americana—1½ in., 1¾ in., 2 in., 2½ in.

EVERGREENS

Abies Douglassi—3 to 4 ft.
Picea Alba—3 to 4 ft.
Retinospora Plumosa—18 to 24 in., 2 to 2½ ft.
Retinospora Plumosa Aurea—18 to 24 in., 2 to 2½ ft.
Thuja Hoveyi—18 to 24 in.

SHRUBS

Cornus Alba Siberica—2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
Deutzia Pride of Rochester—3 to 4 ft.
Hibiscus Syriacus (Althea)—3 to 4 ft., 4 to 5 ft. bushy,
4 to 5 ft., tree shape.
Kerria Japonica—2 to 3 ft.
Kerria Japonica Variegata—15 to 18 in.
Ligustrum Ciliatum—2 to 3 ft.
Ligustrum Ovalifolium—12 to 15 in., 15 to 18 in., 18 to 24 in.,
2 to 3 ft.
Philadelphus Coronarius—3 to 4 ft., 4 to 5 ft.
Philadelphus Coronarius Aurea—15 to 18 in.
Philadelphus Gordonianus—3 to 4 ft., 4 to 5 ft., 5 to 6 ft.
Philadelphus Grandiflora—3 to 4 ft., 4 to 5 ft., 5 to 6 ft.
Rhus Copallina—2 to 3 ft., 3 to 4 ft.
Sambucus Nigra Aurea—3 to 4 ft., 4 to 5 ft.
Spirea Opulifolia Aurea—3 to 4 ft., 4 to 5 ft.
Spirea Thunbergii—2 to 2½ ft.
Spirea Tomentosa—2 to 3 ft.
Symphoricarpus Racemosus—2 to 3 ft.
Symphoricarpus Vulgaris—2 to 3 ft.
Mahonia Aquifolia—18 to 24 in.

ROSES—Strong Field Grown

Eugene Furst, Frau Karl Druschki, Margaret Dickson, Mrs.
John Laing, Tom Wood, Ulrich Brunner, Killarney, Persian
Yellow, Schiel d' Or, Tausendschon, Dorothy Perkins.

PERENNIALS—In Assortment

Aquilegia, Chrysanthemums, Shasta Daisy, Coreopsis, Del-
phiniums, Dianthus, Eulalia Univitata, Gaillardia, Hibiscus
(Mallow Marvells), Iris, Lychnis, Phlox, Sedum, etc.

FRUIT TREES—FRUIT PLANTS

In Fair Supply.

W. B. COLE, - Painesville, Ohio

Under the present conditions we find the mail is
often delayed and we ask our patrons to please send
advertising matter promptly to our office at Hatboro,
Pa.

PEACH SEEDLINGS AND CUTTINGS

We have for quick shipment 30,000 Peach Seedlings 3-16
and up. In cuttings we have Brown Turkey and Celestial
Fig, Oriental Plane, Carolina and Lombardy Poplar, Willow,
California and Amor River Privet, Spirea, Deutzia. Prices
upon application.

THE CURETON NURSERIES - Austell, Georgia

ESTABLISHED 1893

THE NATIONAL NURSEYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.
Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence
pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading
nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock
offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSEYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

Best sorts in new and standard

ROSES

THE LEEDLE FLORAL COMPANY
SPRINGFIELD-OHIO

2 1/4-inch
pots for
lining
out

4-inch
pots for
short
lists

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myroblan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades, also
Grape and Currant Cuttings and Light Grade of Vines for
Lining Out in Nursery Rows
WRITE FOR PRICES

F. E. Schifferli, Fredonia, N. Y.

HARDY PERENNIAL PLANTS

Phlox, Iris, Delphiniums, Shasta Daisies and many other perennials. Send us your want list for prices or ask us for wholesale price-list.

WILLIAM TOOLE & SON,
Hardy Plant & Pansy Farm,

Baraboo

Wisconsin

EVANSVILLE NURSERIES, EVANSVILLE, INDIANA

Especially high grade stock now ready, 150,000 Cal. Privet, 3 years old cut back. 2-3 ft. with 5 to 10 branches, 3-4 and 4-5 ft. with 8 to 15 branches, exceptionally well rooted, and best quality ever shown. Must be seen to be appreciated.

Budded roses, 2 year exceptionally strong. Hardy perennials, and Hybrid tea, and teas.

Spanish Chestnut 18 to 24 in. Fine line of shrubs.

We invite correspondence.

CHERRY TREES

We offer, two and three year cherry, also some nice 2 year climbing roses, on own roots. All select stock. Write for prices in car lots.

MILTON NURSERY COMPANY,

Milton

Oregon

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing

Ask for Prices.

We are the printers of this Magazine

Attractive Planting of Bushes

Let me send you a selection of Landscape Photographs on approval.

B. F. Conigisky 416 Jefferson St., Peoria, Ill.

HARDWOOD CUTTINGS PRIVET ALL KINDS

We make a specialty of the above and can give you extra good service. Write us.

OAKLAWN NURSERY,

Huntsville

Ala.

STRAWBERRY PLANTS

Summer and Fall bearing varieties, shipped to you or direct to your customer under your tag.

Plants and service that pleases both you and your trade.

Let us quote you

V. R. ALLEN,

59 Lane Avenue

Seaford, Del.

SHADE TREES

We have a fine lot of Ash, Elm, Box Elder, Maple, Catalpa and HACKBERRY. Let us quote you prices on your wants. Can furnish them in carload lots.

GURNEY SEED & NURSERY COMPANY,
Yankton, South Dakota.

Surplus Trees For Quick Shipment

Oriental Plane, Carolina and Lombardy Poplars, Maples, Catalpa Speciosa, Babylonian Willow, all sizes, California, Amoor River, Ciliatum and Ibota Privet, Spirea, Deutzias, Altheas, Lilac, Crape Myrtle, Forsythia, Junipers, Thuyas, Biotas, Roses, Walnuts, Pecans, in any quantity and sizes. We guarantee satisfaction.

THE CURETON NURSERIES

Austell, Georgia

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

RUTHERFORD, NEW JERSEY
Palms and General Decorative Plants, **INSPECT**
Conifers, Shade and Ornamental Trees **INVITED**

ASK FOR WHOLESALE CATALOGUE
Subscribers to "Nurserymen's Fund for Market Development."

The

Established 1841

Gardeners' Chronicle

is the Leading Horticultural Journal in the World

SUBSCRIPTION IN U.S.A., \$4.20
YEARLY POST FREE

Specimen Copy and Catalogue of Horticultural Books post free
on application to the publisher----

The Publishers, 41 Wellington St.
Covent Garden, LONDON, W.C.

Charles Detriche, Senior

ANGERS, FRANCE

Grower and Exporter of Fruit-Tree Stocks,
Forest Tree Seedlings, Rose Stocks, Shrubs,
Vines, and Conifers for Nursery Planting.

For all information as to Stocks, prices, terms, etc., address

Jackson & Perkins Co.

(SOLE AGENTS)
NEWARK, N. Y.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries
Raspberries
Blackberries
Dewberries
Berberry

Currants
Gooseberries
Grape Vines
Privet
Spirea

Rhubarb
Asparagus
Horseradish
Hardwood Cuttings
Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants
for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE OHIO

We sell to THE TRADE only, and make a specialty of

OREGON CHAMPION GOOSEBERRY PERFECTION CURRANT CLEAN COAST GROWN SEEDLINGS

We also have growing for fall delivery a large assort-
ment of general nursery stock, including Fruit, Shade, and
Ornamental trees, Roses, Etc.

Head Quarters for Nursery Supplies.

Correspondence invited.

Portland Wholesale Nursery Co.

122 1/2 Grand Avenue, Portland, Oregon

A Large Stock of Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES
and SHRUBS. All stock clean and thrifty, the
best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1919

Apple, 2 year, fine Ben Davis, Black Ben Davis, Gano, De-
licious, Lowry, Rome Beauty; Shade trees, extra fine, straight
bodies and extra rooted; one to two and one-half inches, Nor-
way, Silver, and Sugar Maple, Pin and Red Oak; Evergreens—
Norway and Hemlock Spruce, Deodar Cedars, Irish Junipers,
California Privet, 2, 3, and 4 year; Sugar Maple Seedlings, six
inches to ten feet.

Write us for prices.

W. FROMOW & SONS

Rhododendrons, the cream of the Hardy
American varieties.

Andromeda floribunda, japonica, and speciosa,
bushy budded plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up
to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES

Surrey, - - - England

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by
all Horticultural traders. It is also taken by over 1000 of
the best Continental houses. Annual subscriptions to cover
cost of postage, \$1.00. Money orders payable at Lowd-
ham, Notts. As the H. A. is a purely trade medium appli-
cants should, with the subscription, send a copy of their
catalogue or other evidence that they belong to the nursery
or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS,
ENGLAND

TREES

Largest assortment in New Eng-
land. Evergreens, deciduous trees,
both common and rarer varieties.

Sturdy, choice stock that can be
depended upon. Send for catalog
and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and cli-
mate produce fine sturdy shrubs.
Special trade prices. By the thous-
ands, hardy Native and Hybrid Rho-
dodendrons—transplanted and accli-
mated. Send your lists let us est.

When writing to Advertisers please mention the National Nurseryman.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and

PRINTED IN ANY MANNER that may be called for

Prices as low as First-Class Work and Unequalled Promptness in Delivery will justify.

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

THE WAR IS OVER Nursery Business Will Boom Are You Prepared?

Plant largely of

ORNAMENTAL TREES, SHRUBS and VINES

Our price list of this stock for lining out in nursery rows is ready now. Write for copy.

THOMAS B. MEEHAN CO.

Wholesale Nurserymen

DRESHER,

PENNA.

Subscribers to "Nurserymen's Fund for Market Development."

Peach Pits

Prices on application

J. Van LINDLEY NURSERY CO.
Pomona, N. C.

Subscribers to Market Development Fund.



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the **Nursery, Florist, Seed Trade and Allied Industries.** With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address

The Florists' Exchange, P. O. Box 100, Times Square Sta.

When writing to Advertisers please mention the National Nurseryman.

Good Nursery Stock Is Scarce

We offer for immediate acceptance

Apple trees:

- 500 Baldwin
- 2000 Ben Davis, 4-5 ft., 5-6 ft.
- 2000 Gano, 4-5 ft., 5-6 ft.
- 500 Fourth of July
- 5000 Jonathan, 3-4 ft., 4-5 ft.
- 1500 Northern Spy
- 3000 Red Astrachan,
3-4 ft., 4-5 ft., 5-6 ft.
- 1500 Ben Davis
- 1500 Gravenstein
- 8000 Grimes' Golden,
3-4 ft., 4-5 ft., 5-6 ft.
- 1500 R. I. Greening
- 1000 N. W. Greening, 3-4 ft., 4-5 ft.
- 1500 Winter Banana
- 2000 Winter Banana, 5-6 ft.

Peach trees:

- 2000 Ray, 4-5 and 5-6 ft.
- 8000 Belle of Ga., 3-4, 4-5, 5-6 ft.
- 5000 Belle of Ga., **June Buds**,
4, 6, 8, 12 inches

Pear trees:

- 4000 Keiffer, 4 yr., $\frac{3}{4}$ to $1\frac{1}{4}$ inch
- 1000 Bartlett, Laurence, Seckel,
Buerre, de Anjou and Clapp's

Grapes:

- 2000 Concord, 3 year
- 1000 Moore's Early

Norway Maples:

1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$ and 4 inch trees,
good roots and good tops.

Planes: Oriental

1, $1\frac{1}{4}$, $1\frac{1}{2}$, $1\frac{3}{4}$ and 2 inch.

Poplars:

Lombardy,—1, $1\frac{1}{2}$, $1\frac{3}{4}$, 2, $2\frac{1}{2}$ inch.

Oaks:

2, $2\frac{1}{2}$, 3, $3\frac{1}{2}$ inch.

Evergreens:

Kosters and Colorado Spruce
3-4 ft., 4-5 ft., 5-6 ft., 6-7 ft.

Norway Spruce

3-4 ft., 4-5 ft., 5-6 ft., 6-7 ft., 7-8 ft.

Strawberry Plants:

- 100,000 Klondike
- 100,000 Gandy
- 50,000 Progressive,

And twelve other standard varieties.

Hemlock Spruce:

2, 3, 4, 5 ft.

American Arborvitae:

2-3 ft., 3-4 ft., 4-5 ft., 5-6 ft.

Privet: California

$1\frac{1}{2}$, $2\frac{1}{2}$, $3\frac{1}{2}$, 4-5 ft.

Shrubs: Good assortment of leading kinds.

Barberry Thunbergii:

1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3 ft.

A full list of Shrubs, two year extra grade,
2-3, 3-4 and 4-5 ft.



ORDER PROMPTLY

HARRISONS' NURSERIES,

Berlin,

J. G. Harrison & Sons

Maryland

Subscribers to "Nurserymen's Fund for Market Development."

Press of Robinson Publishing Company, Hatboro, Penna.



THE NATIONAL NURSERYMAN



MARCH 1919

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa

Our Specialty

A large assortment of high quality Nursery
Stock for the Wholesale Trade.

Fruit Trees, Small Fruits, Ornamental Trees,
Shrubs, Roses, and Vines.

A FINE LOT OF
Elm, American White, all sizes

Wanted — Hansen Hybrid Plums and Compass

Ask for Trade Lists. Write us about your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Progressive, Superb

and Peerless

...Everbearing...

Strawberry Plants

We can supply you fresh dug every
day. Healthy true-to-name, well root-
ed at attractive prices.

Address

The W. F. Allen Company

Salisbury, Maryland

To the Trade:

*Are you watching our
Bulletins?*

*They are money-makers
for you.*

C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

The Call

is for better stock at reasonable prices. Our organization of thirty years' standing enables us to give you both, together with prompt service.

Bulletin No. 3 was mailed to the trade February 15th. Did you get a copy? If not, write us. It will pay you to read over carefully our bulletins, which will be mailed about every two to three weeks during the balance of the season. Some lines are scarce now, others will be before Spring. J. & P. Preferred Stock can be had this season in good quantities as usual. Write us about those scarce, hard to get articles. If we haven't got them, we know where they can be located.

Jackson & Perkins Company
Newark, - New York

We are subscribers to the Nurserymen's Market Development Fund.

The
Preferred
Stock

The
Preferred
Stock

PRICES SMASHED

on following

FIRST CLASS STOCK

AMERICAN ARBOR VITAE (transplanted and sheared specimens) 5-6 and 6-7 ft.

AMERICAN ARBOR VITAE (Smaller sizes—unsheared)

HEMLOCK (Transplanted and sheared specimens) 2-3; 3-4; 4-5; 5-6 ft.

PIN OAKS, 8-10 ft. Cal. 1½-2 in.
10-12 ft. " 2-2½ in.
12-14 ft. " 2½-3 in.

KALMIA LATIFOLIA, Fine Bushy Stock, 1-1½ ft.; 1½-2 ft.

HYDRANGEA P. G. 1½-2; 2-3; 3-4 ft.—Well branched.

FORSYTHIA, HONEYSUCKLE, SYRINGA, SPIREA
WEIGELIA, PERENNIALS, WILLOWS, ETC.

POPLARS for lining out

" LOMBARDY 3-4; 4-5; 5-6 ft.
" CAROLINA 3-4; 4-5 ft.

FRUIT TREES—Apples in ½ and ⅝ in. grades.
Peaches in 9-16 grade.

Pleased to Quote on small quantities or car load lots.

THE BARNES BROS. NURSERY CO.

Yalesville, Conn.

Box E.

L.R. TAYLOR & SONS

TOPEKA - - - KANSAS

FOR SPRING 1919

A fine lot of—

Apple Seedlings
Kieffer Pear Seedlings
Japan Pear Seedlings
Forest Tree Seedlings

also

A Large Assortment of Two and Three Year

Apple Trees
Forest Trees, Shrubs, Etc.

Stock is in cellar and can be shipped promptly

Hill's Evergreens

We are headquarters for Everything in the Evergreen line, and with few exceptions have our usual full supply, but some things are scarce and getting scarcer every day. Owing to lack of imports, demand is brisk, and shrewd Nurserymen are covering their requirements early.

Nurserymen—Send us your list of wants in young Evergreens for lining out. Also Deciduous Trees, Shrubs and Vines. Our Propagation Department is one of the largest and most complete in America, and feel sure we can save you money and give complete satisfaction.

Dealers—Let us take care of your wants in Windbreak, Hedge and Ornamental Evergreens. Send in your list for pricing now, while assortment is complete.



The D. HILL Nursery Co., Inc.

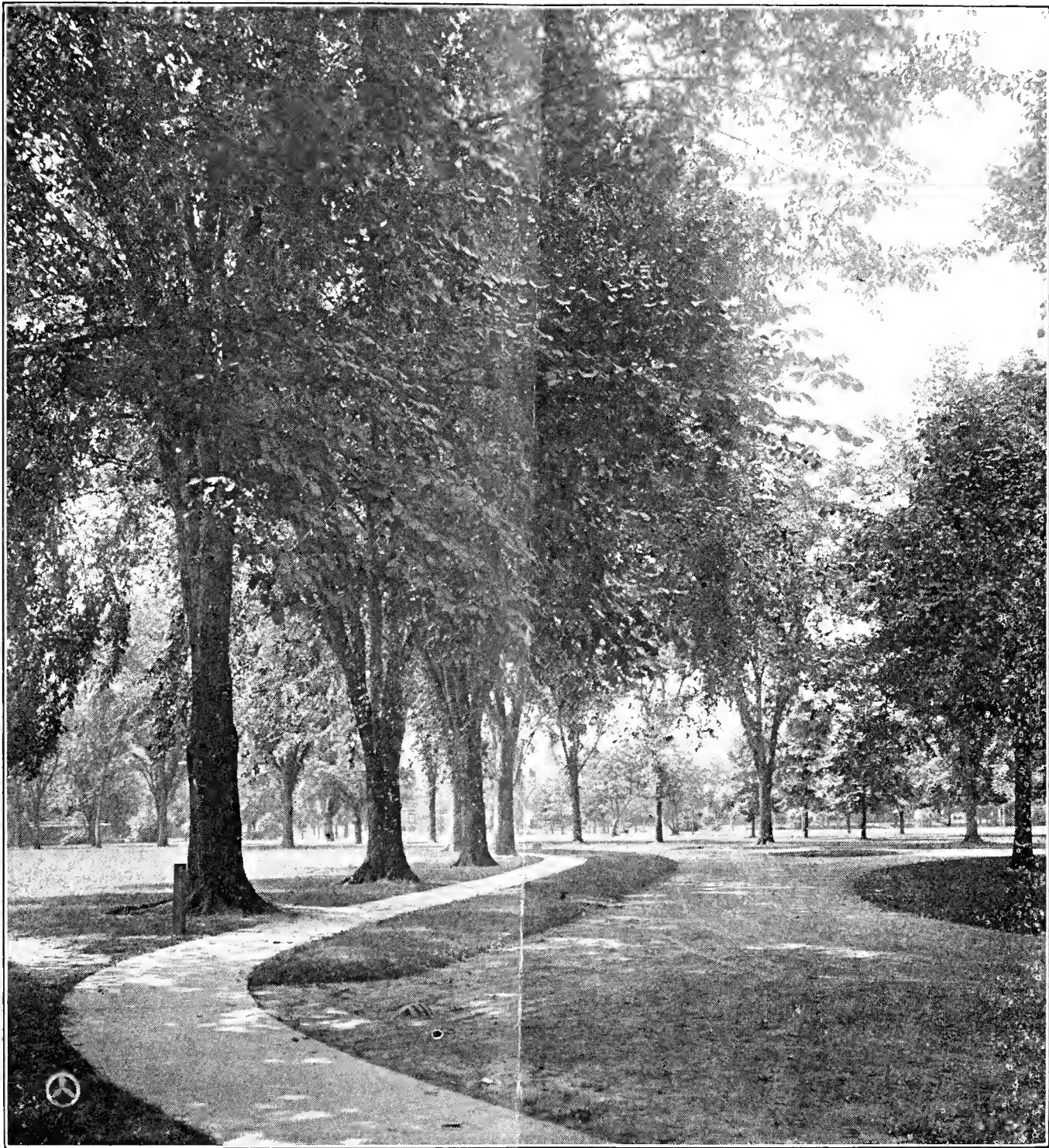
Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

PAINESVILLE NURSERIES



AMERICAN ELMS

THIS IS THE PLACE

To look first,—and save time for

FRUIT TREES

NUT TREES

SMALL FRUITS

ORNAMENTAL STOCK:

DECIDUOUS TREES,

EVERGREEN TREES,

SHRUBS

FIELD GROWN ROSES

Hardy Perennial Plants

Greenhouse Plants and Bulbs

Definite Want Lists promptly quoted.

SEEDS

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

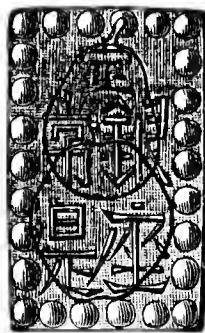
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

73 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

For Spring 1919

Our largest surplus consists of the following:

Montmorency, Richmond & Dye House $\frac{3}{4}$ in. up
Apple - - - - 3 and 4 years

Ben Davis	Dr. Matthews
Benoni	Gano
Banana	McIntosh
Canada Red	Maiden Blush
Carson, (red, earlier than Yell. Trans.)	Stark
Ragans Red, (Black Ben Davis)	Wagoner

Plums - - - - 11-16 and 5-8 in.
Lombard, Bradshaw, Shropshire.

Norway Maple, (20,000) - - up to 2 in.
These maples are straight and fine stock.

American Elm, (25,000) - - up to 2 $\frac{1}{2}$ in.

Spirea Van Houtti, 3 to 4, 4 to 5, 5 to 6 ft. bushy

Also a general assortment of small fruits,
shade and ornamental trees and plants.

C. M. Hobbs & Sons

Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."



PEXTO

More Business for the Nurseryman This Book Will Help You Get It.

Knowledge brings desire. Correct pruning is no exception. An understanding of the fundamentals of this important art will not only create new customers for you, but will make better buyers of your old ones.

The Little Pruning Book points the way. Written by an expert, it is an authoritative guide to right pruning. It tells how, when and where to prune for the most healthy and vigorous growth—for the biggest and most luscious fruit, the most beautiful blooms, and longest life.

Our Cooperative Plan of Selling

In bookstores, The Little Pruning Book sells at 50 cents. But we have a cooperative plan of selling, whereby you can place this handy manual in the hands of present and prospective customers, at a good profit to yourself.

Sending for a free volume does not obligate you in any way. It will bring you details of our plan of distributing this educational work, through nurseries.

THE PECK, STOW & WILCOX COMPANY

Mfrs. Mechanics' Hand Tools, Tinsmiths' and Sheet Metal Workers Tools and Machines, Builders' and General Hardware.

Southington, Conn.

Cleveland, Ohio

Address correspondence to 2189 W. Third St., Cleveland, Ohio

PEXTO

PRUNING SHEARS

When writing to Advertisers please mention the National Nurseryman.



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CESHIRE

...Connecticut...

We are now ready to quote lowest prices on
**FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities. Send list of your requirements for lowest prices. Trade list ready.

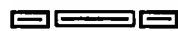
The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by
The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

1918 Peach Seed



We offer a surplus of
100 bushels of North Carolina Peach Pits
Crop 1918

At \$3.00 per 50 pounds
F. O. B. here



H. F. Hillenmeyer & Son
LEXINGTON, KY.

FAIRFIELD NURSERIES
FRUIT AND SEED FARMS

I have sold all the stock I will have this Spring, but this Summer I will be ready to book orders for Fall, 1919 and Spring 1920 delivery.

The war is over and good times are ahead. No more guns or ammunition will be needed, but you will want more of my Grape Vines, Scarlet and Crimson clover and Cow-Peas than ever before.

Keep me in mind.

CHAS. M. PETERS

P. O. Address Salisbury, Wicomico County, Maryland.
Long Distance 'Phone and telegraph, Salisbury, Maryland.

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

**Rawhide Brand of Shipping
Tags and Tree Labels**

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.
West Chester, Pennsylvania

ROSE STOCK

Be independent grow your own ROSE STOCKS for budding or grafting. Those using ROSA MULTIFLORA JAPONICA STOCK prefer it to Manetti. We offer for immediate delivery New Crop unhulled Seed.

95 Chambers St.

McHUTCHISON & COMPANY

Write for prices.

New York, N. Y.

Ornamental Nursery Stock

TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS PLANTS

Large assortment. Long list of varieties and sizes

Get our New Trade Catalogue,—ready now.

Fall price list out of date.

Thomas B. Meehan Co.

WHOLESALE NURSEYMEN,

DRESHER

PA.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Spring 1919

250,000 Cal. Privets in grades 2 and 3 yr.

500,000 Asparagus, 2 and 3 yr., Asst.

Barberry Thun., 18-24 in. and 2-3 ft.

Lombardy Poplars in grades 6 to 16 ft.

Oriental Planes in grades 6 to 12 ft.

Tulip Poplars, 6-8 ft.

Horse Chestnuts in grades 7 to 12 ft.

Catalpa Speco in grades 8 to 12 ft.

Butter Nuts 4 to 8 ft., in grades.

Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft.,
Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft.
and 4-5 ft., Hydrangeas P. G. 18-24 in. Write for Prices.

Are you taking good care of your Plants and Shrubs?

Keep them snug by using our

NURSERY BURLAP

INTERSTATE BAG CO.

St. Louis, Mo.

Write us for prices

Dept. N.

GREEN'S ROCHESTER TREES

For spring digging we offer the following stock at wholesale prices, all first class. Apple trees:—Baldwin, Banana, R. I. Greening, Delicious, all sizes.

AMERICAN ELM 10 to 12 ft.
8 to 10 ft.
6 to 8 ft.
4 to 6 ft.

NORWAY MAPLE 8 to 10 ft.
6 to 8 ft.

HARDY CATALPA 8 to 10 ft.
6 to 8 ft.

GOLDEN WILLOW 8 to 10 ft.
6 to 8 ft.
5 to 6 ft.
4 to 5 ft.

BUTTERNUT 6 to 8 ft.
5 to 6 ft.
4 to 5 ft.

BLACK WALNUT 6 to 8 ft.
5 to 6 ft.
4 to 5 ft.

NORWAY SPRUCE 3 to 4 ft.
2 to 3 ft.

ASPARAGUS ROOTS 2 years old

Write for prices.

Green's Nursery Company
ROCHESTER, N. Y.

J. H. Skinner & Co.

Topeka,

Kansas



Japan Pear Seedlings.

Russian Apricot Seedlings.

Forest Tree Seedlings—Catalpa, Maple,
and Locust.

Fruit Trees—Apple, Cherry, Kieffer Pear,
Peach and Plum.

Rhubarb, Divided Roots, True Myatt's
Linneaus.

Grapes

Shade Trees

Flowering Shrubs

Paeonias

IBOLIUM

THE NEW
HYBRID

HARDY PRIVET

(L. Ibota x Ovalifolium)

To be introduced in Fall 1919.

More about it later.

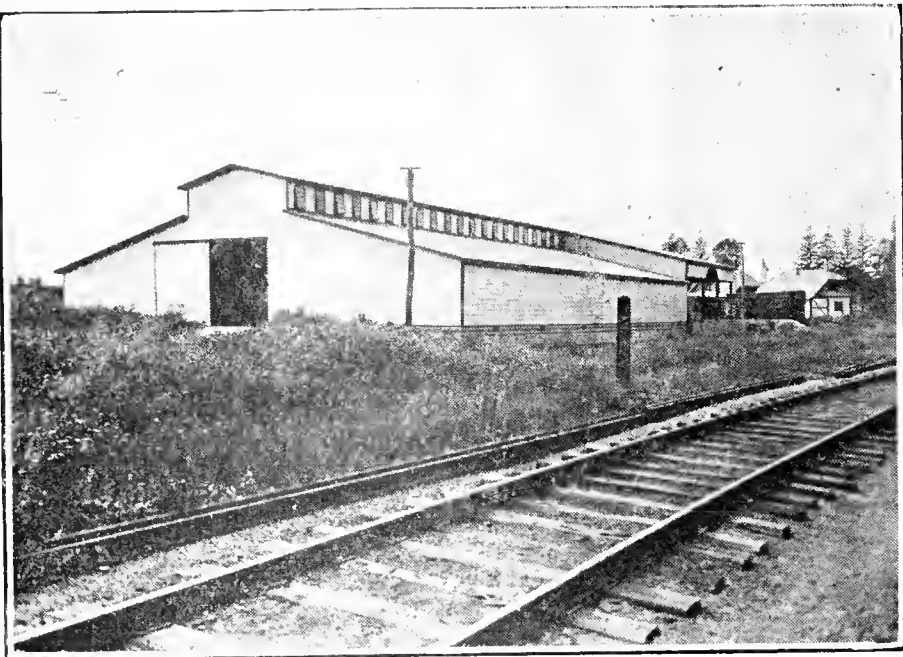
THE ELM CITY NURSERY CO.

Woodmont Nurseries, Inc.

NEW HAVEN, CONN.

When writing to Advertisers please mention the National Nurseryman.

"Our New Storage Cellar and Packing House"



Your Grocer sells Eggs.

He sells "Strictly Fresh Eggs," "Fresh Eggs," "Eggs" and "Cold Storage Eggs."

Which do you buy?

Of course, your Grocer charges more for "Strictly Fresh Eggs" than for "Cold Storage Eggs."

But suppose you had your choice, at the same price, would you tell Jenkins to "send around a case of the best cold storage eggs?" Well, **hardly**. You'd have to negotiate a Peace Treaty with your wife. The Cook would quit.

Now, a good many Nurserymen have been telling us that **Freshly-dug Stock** is the only kind they care to deliver to their customers; they say that it has a **better chance to live and grow** and do well than stock kept in cellar-storage for from three to five months, during which much of its vitality is lost. And some of those Nurserymen replace stock that **doesn't grow**.

True, a few tender varieties require cellar protection; but most stock is fall-dug and cellar-stored because spring shipping has to begin before digging opens; storage saves time and labor in the spring rush. **But what of the Planter?**

Dr. L. H. Bailey says that only one tree or plant out of every hundred ever does the planter any good! He does not lay that to the nurserymen, but—can we nurserymen handle our stock differently and better and **reduce** that loss?

In response to a demand from very many Nurserymen for **spring-dug stock** for spring planting, we cellar only a few tender things; 98% of all our stock stands in the nursery until the tags go out; then the stock for each order is dug separately, brought immediately to our packing-cellar and assembled, packed and shipped **at once**. We can dig early; we are digging and shipping orders **now**. We have plenty of labor. We can handle stock as our customers want it handled. And we can ship it **promptly**.

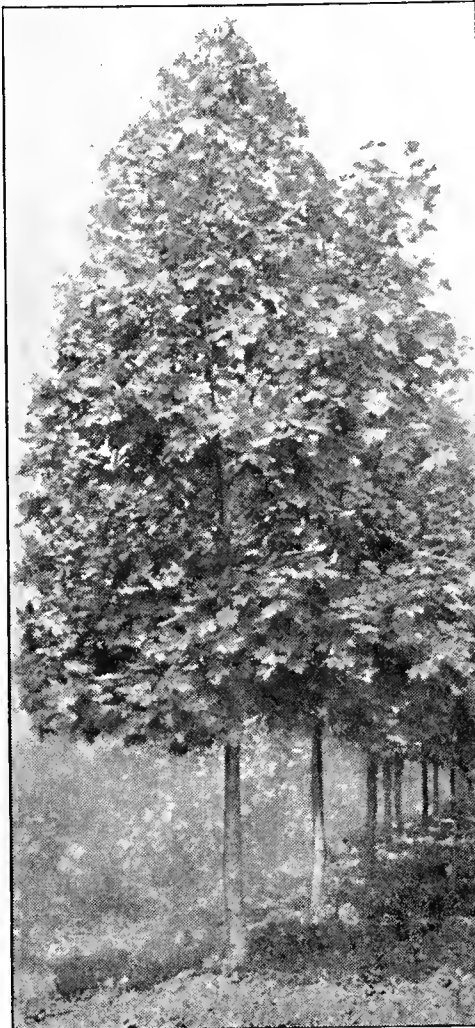
Yes; we had thought of that, too. Yes, we have a large and modern storage-cellar and packing-house newly completed, with our own switch running into it. We use it almost altogether for assembling and packing orders. The stock is **Spring-dug for Spring Planting**.

PRINCETON NURSERIES

Princeton, New Jersey,

March first.

Straight Trunks, Good Heads



is a four-word description of our Norway Maples. Add two more, *Good Roots*, and you have the whole story. You can't get better trees anywhere nor at any price.

We ship by motor-truck to points within 50 miles of New York City. To more remote points we ship by freight, and have no difficulty in securing cars and prompt attention by the railroad.

We can dig at almost any time, and will ship trees when instructed. Shall we book your order?

Swan River Nurseries, Patchogue, New York

Vincennes Nurseries, W. C. REED, Prop. VINCENNES, - - INDIANA

We are pleased to offer for Spring or Fall:

CHERRY, 2 year X X 1 inch up, also $\frac{3}{4}$, $\frac{5}{8}$ and lighter grades.

CHERRY, One year $1\frac{1}{16}$ up, $\frac{5}{8}$ & $\frac{1}{2}$ to $\frac{5}{8}$

Our Blocks of Cherry are largest to be found in U. S. We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment. Grafted Hardy Northern Pecans.

Car Lots a specialty, also fair assortment of Ornamentals.

Subscribers to "Nurserymen's Fund for Market Development."

You can save Time and Money

If you use our neatly packed

SHEET NURSERY BURLAP

Put up in bales

In various size sheets ranging in sizes from 24x24 to 40x40 in.

Write for particulars

Sarachan & Rosenthal

64-66 Hanover Street

Rochester, - - New York

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSEYSTOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVII.

HATBORO, PENNA. MARCH, 1919

No. 3

SOBARIAS



A well grown plant of Sobaria arborea or Spiraea arborea

THE Sobarias are better known to nurserymen under the name of Spiraea and the one most commonly listed in the catalogues is *Spiraea sorbifolia*.

They are a handsome genus of flowering shrubs and it is really a wonder they are not more often met with in shrubbery plantings. Perhaps one of these days some nurserymen will work up a big stock and push them and

then all the others will follow his lead and they will become more common.

As seen by the illustration *Sobaria arborea* has much to commend it and the picture just as well illustrates *S. sorbifolia* and *S. Aitchisoni* for the practical purposes of planting.

The planter is usually concerned more about a plant's

general appearance and time of flowering than botanical differences.

Some of the points in their favor that should commend them to the landscape gardener are: They are adaptable and vigorous in their growth, sometimes too much so as they spread rapidly by means of suckers when the position suits them.

They flower during the summer when there is a dearth of bloom on the average shrubbery border.

A moist, partially shaded position suits them, and it is often difficult to select a shrub for such a place that will be so much at home.

The foliage is rich and handsome and due to the habit of growth usually clothes the plant to the ground.

The one fault, if it be a fault is the unsightly appearance of the dead panicles when the bloom is past. These however, are easily removed which gives the plant a longer season of good appearance than most flowering plants.

The different kinds are all much alike in habit but flower at different times. The first to bloom is the *Sorbaria sorbifolia* which comes in June followed by *S. stellipilla*, *S. asurgens*, *S. arborea* and last of all *S. Aitchisonii* in September.

THE PLANT EMBARGO

Mr. Garfield Williamson's letter in our last issue is a very sensible one to say the least. The whole subject is confused and the issue involved. Unfortunately the subject of the Plant Embargo is one that is not easy to present in a concrete form.

The fact that the subject has been protested from so many angles proves that it should not have been so arbitrarily decided in Washington.

Mr. Williamson specifically takes the National Nurseryman to task for its remarks on the subject in the January issue.

The imaginary foes referred to are not the San Jose scale, Blister Rust or Chestnut Blight. These are real and already here. The plant embargo is not put in operation to keep them out, but other unknown pests that perhaps are comparatively harmless in their own countries. When they come here they might find congenial conditions and cause incalculable damage.

Mr. Williamson misapplies the statement that "insect and plant life are interdependent, and left to themselves the balance is maintained."

If the plants and insects were left in their native habitats this is true, but if we bring the Peach from Persia and plant it in so many and varied localities, breed it up until it has lost resemblance to the original type from which it sprang, is it any wonder it has lost its resistant qualities, and so liable to attacks of disease or pests. The statement was made in an attempt to point out the futility of legislating disease and pests.

Mr. Williamson hit the nail on the head when he said the balance cannot be maintained without the help of scalecide and lime sulphur. This fact is the opinion of gardeners and men who have made growing their life study.

Mr. Williamson also rather sarcastically makes refer-

ence to the Chestnut blight. Here we are dealing with theory on both sides of the controversy. The blight was first discovered in Bronx Botanic Gardens. There was no evidence that it had come to America on nursery stock or in any other manner.

Later, there was discovered a blight on Chestnut trees in China. Our entomologists jump to the conclusion that here was the source of this scourge.

Another theory, and just as plausible, is the American Chestnut, an indigenous tree which formed such a large portion of our native forests when America was first discovered and settled by the white man, and no one knows how many centuries before, grew and thrived under the conditions that existed before the country was settled. Since then vast areas have been denuded of growth. Cities, railroads, farms and all those changes that necessarily take place, have changed the trees' environment and created those conditions which made the blight possible.

Geologists tell us the flora has changed in past ages. In the present instance the change has been sudden due to the help of man. Is it any wonder a blight has attacked them?

Those who doubt this theory might try growing the same crop on the same ground for a few decades without artificial building up of the soil and note the deterioration.

The nurserymen have cause for protest when their business is made to bear the onus of introducing scourges in the country that should not be attributed to it without better evidence.

It is a safe statement to make that there are more insect pests and diseases infesting the flora of this country, say within a radius of 20 miles of our capital city, than there are in all the nurseries in France, Holland, Belgium and England. In fact, nurseries and well cared for orchards and gardens are the only places that are comparatively clean.

MEMORIAL TREES

We endorse the movement to plant trees as memorials. In a small town in middle Tennessee there is today a magnificent pecan tree. The story goes that—

One of Gen. Andrew Jackson's men, who died fighting the Seminoles, was brought back to his home in Tennessee and buried. They found in his haversack some native pecan nuts; doubting that they would live in Tennessee, his comrades, however, planted some of them and there now stands above the old Indian fighter's humble grave a stately tree, a hundred years old, and a fitting monument to a hero.

We have seen the suggestion that the memorial tree for the Southern men of the 30th Division who broke the Hindenburg line at Bellicourt, and fought with such distinction in the campaign around St. Quentin, should be a hickory, because they officially designate this as the Hickory Division, although they later won the sobriquet of the Wild-Cat Division.

Yours very truly,

E. B. DRAKE,
The Cumberland Nurseries.

Market Development

*Statement by F. F. Rockwell, Manager of the Nurserymen's Association
Addressed to the Members of the Western Nurserymen's National Service Bureau,*

I regret that it is not possible for me to be with you in person today. My work for many years has kept me in close touch with people who plant things, the people who form the potential market for the things you grow to sell, and unless the signs and indications are all wrong, there is going to be a very great revival of interest in planting of all kinds. In fact, it is more than a revival. It is a tremendous increase; due to many causes. First: a natural revival of interest in planting, after the artificial restrictions of the war. Second: a result of the "grow your own food" and the "Eat more Fruit" publicity campaigns which the Government and other organizations have been pushing, publicity which could not have been bought for tens of thousands of dollars. Third: and I think, most important of all, the fact that farmers, small town folks, and the better classes of labor living in suburbs, have had more money to spend, have come to buy things they never bought before, and will be ready to spend money to improve their homes outside as well as in, to make them more beautiful and more fruitful, if they are educated to invest some of their increased spending power in fruits and flowers and ornamentals. They have been and are constantly being educated to buy better talking machines, better wall paper, more paint, better automobiles, better house furnishings, electric lighting plants instead of kerosene lamps, and a hundred and one other things which tend to raise their standard of living.

Why is it that the average farmer or suburban home owner will invest from \$25 to \$250 in concrete fence posts, or a new water system, or any of the things mentioned above before he ever thinks of setting out shade trees, or ornamentals, or enough fruit for his own needs? Because it is a better investment? No. I don't think any of you would dispute the fact that for the money involved, trees, shrubs, and fruits will add more to the value of a place than any of these things. Because it means more pleasure? No!

The average man or woman has a born-in-the-blood hankerin' for "growing things" that is as powerful as it is universal. What then, is the reason that your products, trees and shrubs and flowers and fruits, command such a small share of the money that is spent, in proportion to their intrinsic merits.

The reason is simply that those who have the money to spend are constantly reminded, and re-minded, and re-reminded of the merits of all these other articles; and urged, directly through advertising, and indirectly through publicity, to spend money for them. When you men, through co-operative effort, learn to present your goods to the possible buying public as attractively as other classes of goods are presented, and not until then, will the sale of the things you have to offer be what it should be.

But along with more business will have to be developed better business, better business for you, and better business for the use of your products.

Let me take the last point first: better business for the user of your products. It is not the practice of modern successful business-getting concerns to let the customer drop when they have succeeded in selling him an order. They stick by him until they have made sure of his success with their particular product, if it is humanly possible to make him succeed with it. Undoubtedly you are all familiar with the work of the Soil Improvement Committee of the fertilizer people; and the splendid educational bulletins of the cement manufacturers association; and the wide range of work to stimulate better farming carried on by the International Harvester Co., to mention only three out of a great many. Summed up in a word, all this expense and energy spells, Customer's Service. I am not a nurseryman; but I do know the customer's side of the nursery business, and you can rest assured that the one thing more than all others which has kept logical users of nursery products from buying has been the needless failures of the people who have bought but haven't been educated how to successfully care for the things they did buy. And it is your job to educate the customer. It's a hard job, I admit. But it can be done; it has been done in other lines. The point that most nurserymen haven't realized yet is that the customer will pay for it. Yes, he'll pay for it with a smile and ask for more, because he will be satisfied with the results from what he buys, whereas a failure makes a sorehead and a business-killer no matter how cheaply he may have bought his stuff.

And that brings us back to the first point: better business for nurserymen. Now, I realize that it's my job, as your representa-

tive, to educate the customer, "to create a bigger demand for nursery stock of all kinds" as the announced purpose of this campaign for Market Development states. But I want to say to you men right now that nobody can do that to any worthwhile extent unless you growers of trees, shrubs, and plants learn to find some way of getting enough for your products to pay for the service you have got to sell with your plants. Unlimited, blind, cut-throat competition is never going to get you anywhere. They used to have that kind of competition in the farm-implement industry, and in the fertilizer business, and in the cement industry. And let me tell you that in those days they didn't have any money to spend on educating the customer, and market development. I know there are some folks that say that the nurserymen are so doggone hungry for unlimited competition that they never will cut it out; that "you can't revolutionize the nursery business;" "that it always has been so, and always will," etc.

Gentlemen: I hope they are wrong. If they are right—then anyone can have my job that wants it. I think they are wrong: I knew an Old Wise Guy who was one of the Original Contenders that the aeroplane could never be made to work;—last fall he broke his neck looking up when the first New York-Washington mail boat flew over his house. Friends, I know they are wrong, because in any industry as big and as absolutely essential to the nursery business, when conditions become sufficiently bad, there is bound to be a change, and they have become sufficiently bad! If you want to develop a bigger market of satisfied customers, let competition among yourselves be on the basis of quality and service, not on cheap prices, and, consequently, cheap stock. You cannot afford to have dissatisfied customers even for the pleasure of doing business below cost!

And now, just a few words about some of the things of the Nurserymen's Service Bureau (in other words, the Subscriber's Organization for Market Development) has planned, and is going ahead with, just as fast as the funds come in. First of all, is getting the editors of the various garden and farm papers, and magazines, which reach the farmer and the amateur gardener, to take a bigger interest in and devote more space to fruits and ornamentals, to help us to help make America more Fruitful and more Beautiful. Considerable progress has already been made in this direction: The American Agriculturist will, for the first time, have a special Nursery Number in the last February issue, as a result of our suggestion and co-operation. The Field Illustrated one of the highest class farm and stock papers of national circulation, is going to run a series of articles covering shade trees, fruits, shrubs, hardy perennials, etc.,—a new line of material for this magazine. Country Life in America, and the Garden Magazine have promised their active co-operation in every possible way; the latter is going to give us an America more Fruitful and more Beautiful cover on one of the spring numbers, and is planning to have a special annual Nursery number (probably February) after this year; and increased emphasis on fruit and shrubs during this year. Other arrangements are under way. Publicity already achieved would be worth several hundred dollars but could not be bought at any price.

In this connection we are establishing a magazine service of good photos, and general information. I would be glad to receive prints of any suitable photos, especially those showing attractive middle class homes, home orchards, etc. The Bureau can make good use of these right off now; send along anything you may have, with bill.

And next is a series of short articles to be supplied to some four hundred or more papers covering the ground as far west as the Rockies.

These will be supplied to the best paper for the purpose we can find in each section, but to only one in a section. Let me know at once of any paper in your section you would have to suggest. We will get in touch with them and try to arrange for the publication of the entire series. A little later we will publish in the trade papers a map showing the distribution of the papers using these articles.

Although our work is barely started, several requests for lectures have already come in. As much as possible will be attended to personally. In addition to covering all the ground that can be covered in this way; we are arranging two illustrated lectures to be sent out to societies, clubs, etc. These, of course, will be rather general in nature; as funds permit, special subjects will

be added to the list.

We want to get a list of all the speakers we can, at least one in every state, so we can supply lecture dates on short notice anywhere. If you can talk, send in your name. If you can't, send in someone's else. (And we may get yours from him!)

We haven't any advertising fund on hand at this writing, but we plan to do enough this spring to let at least the gardening public know of our existence and our readiness to help them with their problems. Eventually, of course, advertising will be our chief medium for creating new business. If every nurseryman in the country would use five per cent of his advertising appropriation in a co-operative effort for Market Development, well, it's useless to speculate; but keep that thought in mind.

And we have started work on the first bulletin or pamphlet for the Bureau to publish, to help make more business and better satisfied users of nursery stock. It will be printed as soon as funds allow.

Still farther in the future, but not so far but what we have begun work on them, is a one reel "movie" for schools, churches, and garden clubs, showing just how to plant and care for the different kinds of nursery stock, trees, shrubs, plants, when they are received from the nursery. Do you realize that even with the present list of subscribers, it would cost only some four dollars each to make that film? And that most schools and clubs are now equipped for showing movies? And how much better results the man, woman, or boy, or girl without experience in planting would get from the stock you sell them after seeing just how the job of planting should be done. The sooner a few prints of that film can be started on the rounds, the better! It's up to you, especially you who haven't subscribed yet!

Many other plans we have afoot; I won't go into anything further now. There's no use getting the program more than six laps ahead of the bank-roll! You can help a lot by being prompt in sending Mr. Welch your subscription when it's called for, which it will be done soon. And, also, you can help both yourself and us by getting after the fellow who hasn't come in yet, and making him do his share.

This has been a longer letter than I started to write, but I wanted you to know what the Service Bureau is really planning to do, and what you can make it mean to your business.

With apologies to the Secretary, or whoever has had to read you this, and trusting that you will all find the coming spring a prosperous one, I am,

Yours for America more Fruitful and more Beautiful.

THE FEDERAL HORTICULTURAL BOARD'S SIDE OF THE PLANT EMBARGO

UNITED STATES DEPARTMENT OF AGRICULTURE,
FEDERAL HORTICULTURAL BOARD,
Washington, D. C.

February 10 1919.

Dear Sir:

Your attention has no doubt been called to a campaign of protest against the enforcement of Plant Quarantine No. 37, placing additional restrictions on the importation of nursery stock and other plants and seeds on and after June 1, next.

This campaign has for its main object to compel the continued authorization of importations of balled plants or plants with earth about the roots. This class of plants represents the largest element excluded by quarantine No. 37, and the one from which a small group of importers reap their chief profit. This class of plant imports, also, involves the greatest danger of entry of new pests and is one which it is impossible to safeguard by inspection or disinfection so far as insects contained in the soil are concerned. The entry of plants with soil, under the present state of our knowledge of inspection and disinfection, would practically throw down the bars as to foreign pests.

The propaganda against the quarantine was started by the Dreer Nursery Company, in whose nurseries at Riverton, New Jersey, the Japanese beetle was introduced by this firm with Japanese iris. It is for the continuation of just such importations that this company is making its fight, into which it has drawn in support of its contention, by misrepresentation, a large body of florists and ornamental horticulturists and even on occasion some officials who should have been better advised.

Quarantine No. 37 represents years of careful consideration given to the subject by the experts of the Department of Agriculture and of the several States and of the interests concerned. It voices the belief that the policy of practical exclusion of all stock not absolutely essential to the horticulture, floriculture,

and forestry of the United States is the only one that will give adequate protection against the introduction of dangerous plant diseases and insects, and this is the primary and sole object of the quarantine.

The following memoranda have been drawn up in answer to the numerous letters and requests for information that have been received by the Department as a result of this propaganda. The introductory statement issued by the Office of Information indicates the scope of the quarantine and points out specifically the provision for the entry of all foreign plant novelties for introduction purposes; in other words, no plants are completely excluded by this quarantine. These memoranda are sent to you for your information and for use in correcting any wrong conception that may have resulted from this propaganda.

Yours very truly,

C. L. MARLATT, Chairman of Board.

UNITED STATES DEPARTMENT OF AGRICULTURE, OFFICE OF INFORMATION ENTRY OF PLANTS RESTRICTED TO PROTECT AMERICAN CROPS—NO PLANTS COMPLETELY EXCLUDED BY NEW QUARANTINE.

Excluded plants may still be imported through the agency of the Department of Agriculture, in limited quantities to supply the country with novelties and necessary propagating stock, such entry being safeguarded by the highly-developed inspection and quarantine service which has been organized by the department. U. S. DEPARTMENT OF AGRICULTURE EXPLAINS REASONS FOR FAR-REACHING REGULATIONS WHICH GO INTO EFFECT JUNE 1, 1919.

Washington, D. C. The effective date—June 1, 1919—of Plant Quarantine No. 37 will mark the operation of new and strict regulations governing the importation into the United States of plants and plant products. The quarantine order has been promulgated by the Secretary of Agriculture to check so far as possible the introduction of more dangerous crop enemies. Experts of the Department of Agriculture estimate that the losses caused by the pests already introduced, for the most part through the agency of imported plants, aggregate half a billion dollars annually.

Important provisions of the new quarantine are as follows:

Requires permits and compliance with regulations for importation of lily bulbs, lily-of-the-valley, narcissus, hyacinths, tulips, and crocus; stocks, cuttings, scions, and buds, of fruits for propagation; rose stocks for propagation, including Manetti, Multiflora, Brier Rose, and Rosa Rugosa; nuts, including palm seeds, for propagation; seeds of fruit, forest, ornamental, and shade trees, seeds of deciduous and evergreen ornamental shrubs, and seeds of hardy perennial plants.

Leaves unrestricted, except in special cases, importations of fruits, vegetables, cereals, and other plant products imported for medicinal, food or manufacturing purposes; and field, vegetable, and flower seeds.

Excludes, except as noted in next paragraph, all other classes of plants for propagation, including fruit trees, grapevines, bush fruits, grafted and budded roses, forest, ornamental and deciduous trees, ornamental and deciduous shrubs, pine trees of all kinds, broad-leaved evergreens (such as azaleas and rhododendrons), and a long list of plant material commonly known as florists' stock.

The conditions of entry of these various classes of plants and plant products are given in the regulations under the quarantine. A news letter giving more detailed explanation of the conditions governing importations still permitted, shortly will be sent by the Department of Agriculture to all horticultural, nursery and florist trade journals.

Quarantine No. 37 represents years of careful consideration given to the subject by the experts of the Department of Agriculture, and of the several States, and of the interests concerned, followed by a public hearing, and subsequent further investigation and consultation with the principal nurserymen and florists of this country. The quarantine, therefore, embodies the best judgment of the plant experts of the department, and of the several States, concurred in by most of the interests engaged in actual plant production. It voices the belief that the policy of practical exclusion of all stock not absolutely essential to the horticultural, floricultural and forestry needs of the United States is the only one that will give adequate protection

against additional introductions of dangerous plant diseases and insects.

UNITED STATES DEPARTMENT OF AGRICULTURE,
FEDERAL HORTICULTURAL BOARD,
Washington, D. C.

February 1, 1919.

MEMORANDUM CONCERNING QUARANTINE NO. 37, RE-
STRICTING THE IMPORTATION OF NURSERY STOCK
AND OTHER PLANTS AND SEEDS ON AND
AFTER JUNE 1, 1919.

STEPS LEADING TO THE QUARANTINE.

The need for additional restrictions on the importation of nursery stock and other plants and seeds has been under careful consideration by the Board for several years. This need has been emphasized by numerous requests and resolutions urging greater restrictions on plant importations, received from officials and associations representing State Departments of Agriculture, State nursery inspectors and official entomologists and plant pathologists of the United States. Similar requests have been received from National and State forestry, horticultural and other allied associations, and from many leading nurserymen and florists. As a basis for such additional restrictions a public hearing was conducted at this Department May 28, 1918, and the proposed restrictions were thoroughly discussed with all the interests involved, including both importing nurserymen and seedsmen, as well as leading producing nurserymen and florists.

Following this hearing and at the request of the Board, the subject was given careful study in all of its phases by the plant experts of the Department of Agriculture over a period of several months, in the course of which many of the principal nursery and florist establishments of the United States were visited by these experts and the details of the proposed quarantine were discussed with the persons in charge of these establishments. As a result of this extended inquiry a tentative draft of proposed regulations was formulated and submitted to the principal nurserymen of the country. A final conference was then held in the office of the Chairman of the Board, October 18, 1918, at which all interested parties were invited to submit criticisms or suggestions either in person or by letter. The quarantine and regulations as promulgated represent, therefore, the best judgment of the plant experts of this Department based on this extended consideration of the entire subject.

OBJECTIONS RAISED IN RECENT LETTERS OF PROTEST

Recently numerous letters have reached the Department protesting against the enforcement of the quarantine. Practically all of these letters are in response to a printed circular entitled "Protest Against the Horticultural Import Prohibition," signed by Henry A. Dreer of Philadelphia, and sent to nurserymen all over the country. Most of the letters received simply repeat the statements contained in Mr. Dreer's circular letter.

In that letter reference is made to what is considered inconsistencies in the regulations in that they permit the entry of rose stocks for propagation and of six varieties of bulbs, while they exclude budded or grafted roses and all bulbs with the exception of the six varieties referred to.

During the period when the quarantine was under discussion the Federal Horticultural Board was urged very strongly by many advisors, including horticultural and forestry associations and State plant inspectors and their organizations and many American growers, to prohibit the importation of all nursery stock and other plants, on the ground that all such plants are sources of risk of introducing dangerous insects and plant diseases.

Such dangers do exist. They are greatest in importations from little known countries, many of which do not maintain any system of inspection. The dangers are proportionally greater among the miscellaneous classes of nursery stock and other plants, including bulbs, which are imported in smaller quantities, but which represent numerous genera and species and may bring in a corresponding number of new plant pests.

While complete exclusion undoubtedly affords the greatest measure of safety, the governing principle in the quarantine is to limit plant introductions to the classes of plants which have been represented by the plant interests concerned in this country as being essential to plant production, in other words, the raw material out of which salable fruit trees, roses, etc., are made. To these were added certain classes of plants, including

bulbs and seeds, which could be reasonably safeguarded by inspection and disinfection.

In the case of rose stocks the distinction between stocks on the one hand and budded or grafted roses on the other was made with a view to limiting importations largely to such stocks as are usually grown in commercial nurseries where special care is exercised to control and eradicate pests. The stocks permitted entry under Item 3 of Regulation 3 are practically always grown in commercial nurseries, while budded and grafted rose plants may, immediately upon their arrival in the United States, be shipped broadcast over the country to consumers who pay little or no attention to the eradication of any insects or diseases the plants may carry. Rose stocks, furthermore, as imported are seldom more than one year old, whereas the finished rose plants are two years or more old and consequently correspondingly more likely to be the means of introducing pests.

With respect to bulbs it was realized that a danger existed and the entry was restricted to classes of bulbs least subject to risk of bringing in new pests and which from their nature could be most readily inspected and determined as clean. The excluded bulbs involve the less important and miscellaneous importations coming from widely scattered sources and the entry of which is attended with much greater risk of introduction of plant diseases and insect pests.

Provision is made in the quarantine for the entry in limited quantities of these prohibited bulbs and other plants through the office of Foreign Seed and Plant Introduction of this Department, for the purpose of keeping the country supplied with new varieties and the necessary propagating stock, such entry necessarily being safeguarded by the highly developed inspection and quarantine service now organized by this Department. It is impracticable to give this type of inspection to commercial importations. The cost would be prohibitive, especially under conditions which would require very frequent provision for holding the imported material in quarantine for a period of months or years, and the necessity for very high grade and expert inspectors. Furthermore, inspectors with the training required for this critical work are not available for handling importations of these restricted classes of plants on a commercial scale.

Mr. Dreer's letter also conveys the impression that at the hearing and subsequent conference the information given the Board was against the advisability of putting the quarantine into effect. On the contrary, at the hearing of May 28, which was largely attended and of which a stenographic record was kept, the argument was strongly in favor of the quarantine, and, as indicated in the early part of this statement, the restrictions which have been embodied in this quarantine were strongly urged and endorsed both by many representatives of the nursery trade and unanimously by letters received from officials representing the forest, agricultural and horticultural interests of the nation. The conference on October 18 was especially to give opportunity to the small body of commercial importers to discuss the restrictions provisionally determined upon in the regulations which would directly affect their interests, and this discussion, therefore, naturally brought into prominence these objections. On the other hand, important producing nurserymen and florists, both in person and by letter, strongly supported the restrictions as then presented and finally adopted.

The argument presented that this quarantine is unjust to European countries, particularly at this time when they are just released from the restrictions on commerce caused by the war, has weight only in the keen sympathy we all feel, especially for Belgium and France. If, however, there are important dangers to be guarded against and therefore a real need for these restrictions, mere sentiment, however strongly warranted, has no place. In point of fact, with respect to the two countries which have suffered most from the war, France and Belgium, the latter is the only one which is seriously affected by this quarantine. The plant exports of France are largely fruit tree stocks which are still permitted entry. Unfortunately the plant exports of Belgium are largely ornamentals shipped with earth about the roots and are therefore the ones which entail greatest risk to the United States; and, furthermore, the inspection service of Belgium is inferior to that of both France and Holland. In the case of Holland the argument from the war standpoint does not apply to the same extent, and, furthermore, the bulb exports of Holland are not materially interfered with. The potted and balled plants, however, from Holland convey the same dangers that they would from Belgium and other foreign countries, and are accordingly excluded.

With respect to this action as to European countries, it may properly be noted that this quarantine merely places the United States in more close alignment with (but still behind) the action long since taken by these countries relative to plant imports from the United States, France, Holland, Germany, and to a less

extent Belgium, have long maintained practically complete prohibition of plant imports from the United States.

CONDITIONS NECESSITATING THE QUARANTINE

FOREIGN INSPECTION AND CERTIFICATION SERVICE INADEQUATE.

With regard to the actual condition of nursery stock and other plants hitherto received from foreign countries, it is appreciated that the countries which have been most concerned in such exports to the United States have established inspection and certification service, which have very greatly reduced the amount of infestation on such exported plants. The conditions in this respect, prior to the passage of the Plant Quarantine Act and the requirement of inspection and certification on the part of foreign countries, and the rigorous holding of these countries up to as high standard as possible, were deplorable. Brown tail moth nests and gipsy moth egg masses and numerous other insect pests in various stages were coming into the United States in quantity, and in one season thousands of such brown tail moth nests were found in nursery stock, particularly from Holland, Belgium, and France. The improvement since the establishment of this service, as indicated, has been very great, but it has not by any means eliminated the danger.

Of these principal export countries Holland has perhaps as good an inspection service as any, if not the best. The status as to freedom from insects and diseases of plant imports from Holland probably represents the best work that can be expected under existing conditions of inspection and certification on the part of the country of export. Notwithstanding the supreme effort of the Netherlands Government to safeguard its plant exportations to the United States, a great many injurious insects have been found on stock imported from that country since August, 1912, when the Federal Plant Quarantine Act became effective. During this period of six years of enforcement of this act, no less than 148 different species of injurious insects have been collected on nursery stock imported from Holland. Some of these have been found in over 1,100 different shipments of plants. Many others have been detected hundreds of times. It is true that many of these are insects which have already become established in the United States, but many others are insects which have not been so established and which are new elements of danger to the horticulture and agriculture of this country. For example, the European tussock moth (*Notolophus antiqua*) has been found in connection with no less than 67 different shipments of plants from Holland, representing over 16 different kinds of ornamental plants. Similarly, many other injurious leaf-feeding and wood-boring insects have been collected on from one to many different shipments of plants.

SOIL WITH POTTED AND BALLED PLANTS A SPECIAL SOURCE OF DANGER.

The list of 148 different kinds of insects on Holland stock includes comparatively few of the soil-infesting species, because it has not been possible without destruction of the plants to disintegrate and make adequate examination of the soil imported with balled and potted plants. The danger is probably much greater from such insects concealed in the soil than it is from the insects which are found on the aerial portion of the plants. Dr. T. J. Headlee, New Jersey State Entomologist, reported at the hearing conducted by this Department in May, 1918, on the subject of this quarantine, that two years before his office had made a limited study of the insect fauna in balled plants from Europe and a short examination of perhaps two dozen balled plants had resulted in their finding of over twenty different species of insects in the soil.

There is risk of entry from foreign countries through the medium of such soil, of a vast number of insects, many of which may have no relation to the plants imported, but are possibly important enemies of field crops, such as clover, alfalfa, and other forage crops and the grains. For example, there are more than a score of European weevils and root borers known to infest clover, alfalfa, and related plants. Several of these have already been introduced into this country and are now among our most serious forage insect pests. Examples of these are the alfalfa weevil now invading half a dozen States surrounding Utah, its point of introduction, and the clover-leaf weevil now widely distributed throughout the United States. Of the same nature are many insects which affect common truck crops. Several of these have already been introduced with plants imported with soil, such as the European mole cricket, the European earwig, and various wireworms. The list of such European truck crop insects possible of introduction with soil is a very long one. There are also many important European fruit insects which can be introduced with soil about the roots of nursery stock. These include apple, pear, and plum weevils, fruit

and bud weevils, twig and stem borers, and various leaf-feeding insects which hibernate in the soil.

With respect to plant material which it is necessary to bring in with soil, it should be borne in mind also that no system of effective disinfection of the soil about such plants without destroying the plants is known.

PLANT PESTS OF ORIENTAL COUNTRIES.

The risk from importations from Oriental countries and other quarters of the world where the insect enemies and diseases of plants have been very meagerly studied, is illustrated by the establishment in this country from such sources of many of our most important injurious insect pests and plant diseases. Few of these were known prior to their appearance in this country, and therefore could not specifically have been looked out for and guarded against.

INTRODUCED ORIENTAL INSECTS.

Among insects introduced from the Orient are the San Jose scale, the citrus white fly, the oriental peach moth, and the Japanese beetle. The peach moth and the Japanese beetle, furthermore, illustrate insects which it is apparently impossible to kill by any practicable fumigation in their hibernating condition.

The list of insects introduced from such little-explored countries is already very large, and the new pests constantly being intercepted on plant stock now coming in represent a constant and very serious menace to this country. A recent illustration of this state of affairs came in last month's report of Mr. E. M. Ehrhorn, a collaborator of the Board and Chief of the Division of Plant Inspection of the Board of Commissioners of Agriculture and Forestry of Hawaii. Mr. Ehrhorn states that in December, 1918, he made a thorough examination of two small pots of a dwarf Chinese arborvitae (*Thuja orientalis*) offered for entry at Honolulu, and took from the soil about the roots of these plants no less than 122 grubs of a curculionid beetle, a near relative of such injurious insects as the alfalfa weevil, plum and apple curculio, etc.

INTRODUCED PLANT DISEASES

The danger of introducing plant diseases is just as great if not greater than that of introducing new insect pests, and with respect to such diseases inspection is a safeguard of no importance. Very often these diseases are not discoverable by inspection or may develop to a visible stage only after a period of months or years after the plants have been imported. Notable examples of such diseases received from the Orient are the chestnut blight and citrus canker from Japan and China. Regarding the risk of introduction of dangerous diseases from Europe it is significant that of the three serious forest diseases that have been imported into this country in recent years two of them, the white pine blister rust and the European poplar canker, have come from Europe, where both these diseases are well known, and in spite of the protection of the European inspection service.

MANUALS OF FOREIGN INSECTS AND PLANT DISEASES.

A manual describing the dangerous insects likely to be introduced into the United States has recently been published by the Department of Agriculture. It was designed for the information of Federal and State inspectors, and enumerates and describes over three thousand distinct insect pests. Probably half of these are Old World insects injurious to forest and shade trees, and the balance insects injurious to fruit and ornamental trees and to the various farm and garden crops. A similar manual is in preparation on the fungous diseases of plants likely to be introduced into the United States.

LOSSES CAUSED BY INTRODUCED PESTS.

In this discussion the actual losses now being suffered from plant enemies, insect and disease, which have been introduced from foreign sources have not been considered. These losses to agriculture in this country have been carefully worked out by experts to cover both the actual damage of these pests to the crops concerned, and also the cost of the control operations. This is not the place for an extended discussion, but a few illustrations may be given.

EXAMPLES OF INSECTS IMPORTED WITH PLANTS.

Typical examples of insect pests introduced with nursery stock or other plant material are the San Jose scale, the oriental peach moth, and the Japanese beetle. The San Jose scale has been in this country for certainly forty and perhaps fifty years. It became widespread throughout the United States in the late 90's, and at the present time there is practically not a commercial deciduous orchard in the United States that it is not necessary to spray at least once annually to control this pest. The expenditures for apparatus and spraying alone in the United States amount to approximately \$10,000,000 annually. In addition to this are the losses which the insect causes in spite of this

control treatment and they are very large especially in small orchards and household plantings where spraying is not always practiced. This insect alone, undoubtedly has cost this country during these years upwards of \$100,000,000.

The oriental peach moth which gained entry in 1912 with imported ornamental cherry trees from Japan has just begun its spread and depredations. It affects practically all deciduous fruits and bids fair to be a much more destructive pest in the long run than the San Jose scale.

The Japanese beetle, brought in about the same time as the peach moth, has already obtained such firm foothold that in view of its habits and powers of prolonged flight, it is probably incapable of extermination and will no doubt ultimately overspread the United States. It attacks not only practically all fruits, but also many garden vegetables and corn. The amount of damage which it will ultimately cause to American agriculture is undoubtedly tremendous. It is worthy of note that this beetle in the opinion of the experts of this Department and of the State of New Jersey who have investigated the matter, was brought in by the Dreer Nursery with importations of iris from Japan. The insect first appeared in the heart of the Dreer Nurseries and has spread from this center over an area approximately of 25,000 acres, involving four townships in New Jersey opposite Philadelphia.

The annual cost to this country of the San Jose scale and the probable ultimate annual cost of these other two more recently introduced oriental pests, would probably pay for the total importations since the foundation of this Republic of ornamental, nursery and florist stock. The declared value of the importation of such stock for the year 1914 was only \$3,606,808, and it should be understood that the plant stocks still permitted entry represent much of this value.

These insects are mere examples of a vast horde of introduced insect pests. Upwards of 100 different important injurious insects to agriculture and forestry have been thus introduced, and in addition to these, hundreds of other minor insect pests. The total annual loss occasioned by these introduced insect pests to our national forests and to farm crops, etc., from careful estimates which have been made, very much exceeds a million dollars a day, in other words, approximately \$500,000,000 a year.

It is true that many of these foreign insect pests have come in independently of nursery stock, as, for example, the Hessian fly, the pink bollworm of cotton, and European corn borer. Nevertheless the bulk of the introductions have been with living plant material of all sorts.

EXAMPLES OF DISEASES IMPORTED WITH PLANTS.

Losses correspondingly large are chargeable to introduced plant diseases. Nursery stock and other plant importations are responsible for the entry of such important diseases as the chestnut blight which has already destroyed the chestnut forests over much of eastern United States and threatens the existence of the entire chestnut growth of the country, the white pine blister rust, a disease already widespread in the Eastern white pine area, and the citrus canker recently introduced from Japan and Asia and now threatening the very existence of much of the American citrus development of Florida and the Gulf Coast. The attempt in Florida and elsewhere in the United States to eliminate this disease has necessitated the burning of nurseries and hundreds of established orchards. Giant oil torches have been devised which will lickup and utterly consume large fruiting trees in a few minutes and entire orchards in a few days. This means the destruction of property representing thousands of dollars of expenditure and years of labor. Furthermore, Congress has appropriated and is still appropriating considerable sums to aid in the control of these pests.

INADEQUACY OF SPECIAL QUARANTINES.

To prevent the entry of like plant pests quarantines and restrictions have been applied under the Plant Quarantine Act to all important dangers as they appear, and in this piecemeal fashion some twenty restrictive orders and quarantines are now in force against foreign plants and plant products. Such piecemeal action only can be taken, however, when the enemy is known, and gives no security against such unknown or unanticipated enemies as the San Jose scale, the oriental peach moth, and the alfalfa weevil.

NECESSITY OF GENERAL QUARANTINE.

It certainly would seem to be good business and practical common sense to stop as far as possible such dangerous introductions to the agriculture and horticulture of this country. This is the primary object of the action taken in Quarantine 37. The experts of this Department are convinced that it will be possible very promptly to produce in this country all the plants prohibited by this quarantine, and this opinion has been indorsed by leading nurserymen and florists.

After having studied this subject for many years and after giv-

ing earnest consideration and practical trial to the possible alternatives of inspection and disinfection of plant imports, the Department and the country at large have reached the conclusion that the only possible solution of this problem, which is constantly becoming more serious with the widening of commerce, is in the policy of practical exclusion of all stock not absolutely essential to the horticultural, floricultural and forestry needs of the United States. The conclusion is absolutely forced that no other system will give adequate protection to the great fruit and agricultural interests of the country, and these interests are so paramount as to fully warrant the restriction prescribed at this time in Quarantine No. 37.

The main lines of this quarantine are undoubtedly justified, but it is entirely proper at any time for the interests affected to make any suggestion of modification which may appeal to such interests as being warranted to meet essential needs and which can be granted without opening up dangers which Quarantine No. 37 is designed to guard against. Correspondingly, should it develop that the entry of any of the plants or classes of plants now permitted should be accompanied with dangers which cannot be otherwise safeguarded, on such showing the restrictions must necessarily be extended to cover such plants.

In this connection the Department now has prepared an amendment to Regulation 3 permitting the use of sand, soil, or earth in packing the bulbs specified in Item 1 of that regulation when such sand, soil, or earth has been previously sterilized in accordance with methods prescribed by the Federal Horticultural Board.

C. L. MARLATT, Chairman of Board.

TRADE PRICES TO LANDSCAPE GARDENERS

The National Nurseryman,
Flourtown, Pa.

Gentlemen:

We wonder if there isn't something you can do to get the nurserymen who sell wholesale largely to stop quoting landscape gardeners wholesale trade prices, when they are just as willing to pay a higher price. We have been doing business with a landscape man in this section for quite a little while, but since the armistice was signed and railroad conditions have opened up, we find that there has been a change. We recently quoted this party on a list of stock; and when we received a part of the order at our prices, and when we asked him what had become of the balance of the order, he said that it had gone elsewhere, that other nurseries had beat us to it, or something like that. On further inquiry he stated that "——— cut under you over 50% on most things." This landscape architect is in sympathy with us, and wound up his letter by saying,—"I don't blame you for your stand and wish you luck."

What we think of nurserymen who do this kind of business we cannot tell you, because it wouldn't be fit to print. Even the fellows who stand on top of freight trains in freezing weather and turn the wheels to tighten up the brakes have got sense enough to get a living price for what they do!

Yours truly,

6' 3"

WILL SOME NURSERYMAN PLEASE ADVISE?

A correspondent wants the opinion of practical nurserymen as to the best two horse digger to use for digging out such trees as Elms, 1½ to 2 inch caliper. The soil is heavy clay. Is it possible to dig such trees with a two horse digger or is it necessary to use four?

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., March 1919

Subscribers to "Nurserymen's Fund for Market Development"

THE

PLANT EMBARGO

Speaking of the Plant Embargo, a correspondent of the National Nurseryman complains "Not one of these writers, to my mind has presented the subject in other than a partisan manner."

Whatever our short-comings, or our editorial opinion may be in this respect, the columns of the National Nurseryman are open for the expression of opinion from any and every source on the subject.

Our one desire above all is to best serve the nursery or horticultural interests of the country. This can only be done by candid, open criticism and by publishing all the facts and opinions as they become known.

Candidly we do not approve of the Plant Embargo, not because we do not believe there is danger in the introduction of plant diseases and insect pests, but because we believe it to be ill considered, arbitrary, illogical, unjust, and un-American.

Ill considered because there should have been a closer union of effort between the entomologists and horticulturists of the country, so as to arrive at a better syn-
thetical conclusion before putting such a drastic measure into operation.

Arbitrary because five men forming the Horticultural Board used too much power in a discretionary way.

Illogical because they place an embargo on one plant, allowing another to come into the country that has the same possibilities of carrying disease or pests.

Unjust because it damages a lawful and beneficial industry without proving the measure would be an effective remedy.

Un-American because it is restrictive, narrow, selfish

and recognizes too readily our country's inability to cope with imaginary dangers.

THE PROPOSED EUROPEAN CORN BORER QUARANTINE

Report of the hearing before the Federal Horticultural Board

The Federal Horticultural Board sent out notices February 11th that there would be a public hearing at the Department of Agriculture, Washington, D. C., on February 26th to consider the advisability of quarantining the States of Massachusetts and New York to prevent the spread of the European Corn Borer.

Nurserymen in these States will be much gratified to learn, as a result of the hearing, that a Federal quarantine is not likely to be put into immediate effect, the plan being to allow the State authorities to handle the situation.

It was brought out at the hearing that the European Corn Borer had only been discovered in restricted area within the State of Massachusetts, and the identity of the pest as reported in New York State had not been definitely established, and to have quarantined both of the entire States would have been a serious matter for the nurserymen, as it would stop all interstate shipments of all herbaceous plants and possibly corns, bulbs and tubers, to say nothing of market gardener's and farmer's produce.

Both Massachusetts and New York are to be congratulated on having such men as Wilfred Wheeler, Commissioner of Agriculture for Massachusetts, and G. A. Atwood, State entomologist, New York, who attended the hearing in company with C. H. Perkins, President of the New York State Nurserymen's Association, William Pitkin, Rochester, New York, W. H. Wyman, North Abington, Mass., A. E. Robinson, Peter Koster, I. S. Henderson, Joseph Breck, and D. C. Stranger, representing the nursery interests, in addition to those representing the Market Gardeners.

It was pointed out, there were practically no nurseries in the infected area, and while no detailed plans had been worked out to cope with the menace, the State authorities felt equal to the emergency, vigorous measures would be taken to prevent the spread of the pest and eradicate it.

Dr. Marlatt, Chairman of the Federal Horticultural Board agreed that as the infestation was entirely within the State that it might be possible to delay action by the Board to give the State authorities an opportunity to see what could be done before resorting to the hardship that a State wide quarantine would necessarily impose.

OHIO NURSERYMEN MEET

The twelfth annual meeting of the Ohio Nurserymen's Association was held at the Deshler Hotel, Columbus, Ohio, on January 29th. Following is a list of the officers elected for the ensuing year:—

President, H. S. Day, Fremont, O.

Secretary, W. N. Scarff, New Carlisle, O.

Treasurer, A. R. Pickett, Clyde, O.

Answers to Correspondents



Would you kindly give us some information in regard to the best time of sowing perennials. W. N.

Ans.—The best time for sowing perennials is now, that is providing you have a cool greenhouse. There is really no difference in raising perennials from seed than there is early cabbage or tomatoes.

You will find shallow boxes 18x24 inches and three inches deep is a good practical size.

See that the bottoms are not too tight to permit of drainage. Get a supply of these on hand and a good pile of sifted light soil under cover so it will be in good condition for handling.

When ready to sow the seeds put a layer of well rotted, dryish manure at the bottom of the box, fill up level with fine sifted soil, press down the corners, level, then press evenly with a flat board, sow the seed thinly, cover tightly, the very fine seed need not be covered at all, a good rule is to cover the seed about their own depth, then sprinkle with a fine rosed watering can, and cover the boxes with glass until the seeds germinate.

After they have made their seed leaves is the critical time as many kinds damp off very readily.

Remove the glass so as to give more air upon the first sign of damping, and watch very closely.

They should be pried out in other flats or boxes just as soon as they can be handled. It is sometimes necessary to prick them off while they are extremely small if the plants are to be saved.

TENNESSEE STATE NURSEYMEN'S ASSOCIATION

The Tennessee Nurserymen's Association met in joint convention, with the State Florists and State Beekeepers Association and the Tennessee State Horticultural Society on January 28th to 31st at Nashville, Tenn.

There was a large and enthusiastic gathering made up of the leading nurserymen of Tennessee and neighboring states.

The estimated attendance being about 200. Several new members joined the Association which now has a membership of 180.

George W. Poague, Graysville, Tenn., was elected President, and G. W. Bentley, Secretary-Treasurer.

The home place of the Whiting Nursery Company, Yankton, South Dakota, has been sold for \$500 per acre. This is, it is believed, the record price paid for farm lands in South Dakota. The place consists of 42 acres and is now covered with nursery trees which the Whiting Company will remove so far as they can find a market before it vacates on June 1st.

The Whiting Company will clear off as much of the nursery stock as possible before June 1st when Mr. and Mrs. Whiting expect to move to Bayfield, Wisconsin, where they have heavy interests.

NEW YORK NURSERYMEN'S DINNER

Seventy-four nurserymen sat down to the New York State Nurserymen's Association Annual Dinner at the Seneca Hotel, Rochester, N. Y., February 22nd, 1919.

Taking it altogether, the affair was the best attended and most successful ever held.

"Jim" Pitkin was there in his old-time roll of leader of the "chanters," which effectually prevented periods of depression.

Charles H. Perkins, 2nd, President of the New York State Nurserymen's Association, presided, and introduced William Pitkin, the Perennial President of the Ananias Club, as toastmaster, who performed the duties in his usual characteristic way.

James M. Pitkin gave several humorous reminiscences.

John H. Dayton read in a serious vein, an admirable paper on market conditions.

John Watson was there and delighted his hearers in a masterly oratorical effort.

The most important event of the evening was the argument made for the Nurserymen's National Service Bureau by the manager, F. F. Rockwell, of New York.

He was followed by Robert Pyle and J. Edward Moon, who made stirring appeals on the same subject.

Mr. Allen, of New York, formerly manager of Pyrene Company, strongly advocated the value of publicity and co-operation.

GREETINGS

To the Honorable Chairman and Members of the
Federal Horticultural Board,
Washington, D. C.

We, the members of the Illinois Nurserymen's Association, duly assembled in convention February 5th, 1919, heartily endorse the action of your Board in establishing the Federal quarantine No. 37, restricting the importation of nursery stock and other plants and seeds on and after June 1st, 1919.

Realizing that this quarantine is the result of your thorough investigation, we request that this quarantine be made permanent so as to safeguard the development of the agricultural, horticultural, and forestry interests of America, as well as the nurserymen and growers, propagating and distributing such nursery stock, plants and seeds as are being excluded by this quarantine.

ILLINOIS NURSERYMEN'S ASSOCIATION.

OAK PARK NURSERIES

The business of the Oak Park Nurseries has been purchased by Leslie H. MacRobbie, a contract to that effect having been signed this week with the former owners, E. B. & V. S. Tiger. The nursery will be put in shape, new stock will be added, a new office will be built, and it will be opened for business in the spring of 1920. Mr. MacRobbie has been in the nursery business in Patchogue for the past six years as manager of the Swan River Nurseries, which position he will hold until the opening of the new business.

The Foreign Nursery Stock Quarantine

The Nurserymen's Legislative Committee Meets Secretary Houston.

Through the efforts of Senator Calder and Congressman Bacharach, a committee from the Society of American Florists and the Legislative Committee of the American Association of Nurserymen secured an interview with the Secretary of Agriculture, Hon. D. F. Houston, in Washington, on Saturday morning, March 1st, and entered a protest on the recent order of the Federal Horticultural Board, excluding, after June 1 next, importations of nursery stock of every description, excepting fruit stocks, rose stocks and a few bulbs and tubers.

On the Florists' Committee were J. G. Eisele, F. R. Pierson, J. H. Totty and C. B. Knickman; and on the Nurserymen's Committee, J. G. Harrison, Chairman; Thomas B. Meehan, Wilmer W. Hoopes, Charles Perkins, 2nd, and Edward Moon.

Curtis Nye Smith, Counsel for the Nurserymen's Association, presented to Mr. Houston a copy of the Nurserymen's brief, and also one prepared by the Florists' Committee, and in doing so directed the attention of Mr. Houston to the most important paragraphs in them.

Mr. Houston assured the committee that it was his desire to do justice to all, and that in accepting the decision of the Federal Horticultural Board on this matter, he had done so knowing that they had been investigating the subject for many months and had arrived at their conclusion only after deciding that such action would be the only method of safeguarding this country from insects and disease now prevalent in other countries.

He wanted the Committee to feel, however, that it was far from his desire that the florist or nursery business should be injured by any unjustifiable action and assured them that he would carefully read and consider the briefs submitted to him and as soon as possible would advise them what action he would take.

Following is copy of the brief submitted by Counsel Smith for the Nurserymen's Committee.

IN RE OBJECTIONS TO FEDERAL QUARANTINE ORDER NO. 37.

SYNOPSIS OF CONTENTS

1. Statement of American Association of Nurserymen.
2. Appeal to the Secretary of Agriculture from the Federal Horticultural Board.
3. Grounds of objections of nurserymen to Quarantine Order No. 37.
 - A. Of Doubtful Legality.
 - (x) The evidence does not support the Quarantine.
 - (y) Unreasonable discriminations depriving citizens of equal protection of the laws.
 - (z) No legal hearing given on this quarantine.
 - B. Quarantine is unnecessary.
 - C. Quarantine is unfair.

- D. Impossibility of securing domestic grown ornamental nursery stocks.
- E. Quarantine creates hostility and retaliations from foreign nations.
- F. American consumers of foreign grown nursery stock not considered by Quarantine.

4. Conclusion and Recommendations.

A STATEMENT OF THE PRINCIPAL OBJECTIONS OF THE AMERICAN ASSOCIATION OF NURSERY- MEN TO FEDERAL PLANT QUARANTINE ORDER NO. 37, EXCLUDING CERTAIN FOREIGN GROWN NURSERY STOCK.

The American Association of Nurserymen is the oldest and largest organization of nurserymen in the United States, having been organized forty-three years ago and represents all of the larger and many of the smaller nurserymen throughout the United States. It can be said without successful denial that this Association more nearly represents the ideas and wishes of those engaged in the important industry of importing, growing, and selling of all kinds of plants, trees and shrubs, more generally known as nursery stock, than any other organization, or group of persons. This Association by a unanimous resolution at its Annual Convention declared its opposition to the total exclusion of foreign grown nursery stock, such as is provided in Quarantine Order Number 37, and has, by its officers, recently authorized this statement of objections and such further action as may be found necessary in order to secure the repeal or substantial modification of said Order Number 37. In a desire to be quite frank, but more especially to dispute the erroneous statements of the proponents of this Quarantine Order it is alleged that there are some members of this Association who favor this exclusion order. These members are very few indeed, and, from an intimate knowledge of their business it is believed that their approval of the order is influenced by their personal gain or profit resulting from the effects of this Quarantine Order. It is confidently stated that the greater proportion of all American Nurserymen disapprove of this order, and all registering their objections from a firm conviction that said order is unwise, unnecessary and profoundly injurious to the horticultural interests of this country. These objectors are not prompted by two importers as has been stated by the Chairman of the Federal Horticultural Board.

This Association is advised that other organizations of nurserymen, notably, the New England Nurserymen's Association, the State Associations of Nurserymen of Ohio, Pennsylvania, New York and New Jersey have

made formal objection to Quarantine Order No. 37.

AN APPEAL TO THE SECRETARY OF AGRICULTURE

This statement of objections is an appeal to the Secretary of Agriculture to review and revise the Quarantine Order No. 37 ostensibly promulgated by the Secretary under and by virtue of Section 7 of the Federal Plant Quarantine Act of August 20, 1912, but really the conclusions of the Federal Horticultural Board.

While this Plant Act provides for a public hearing which shall precede the promulgation of any Quarantine Order, yet in the case of this Order Number 37, the nurserymen are not satisfied that the Board has given full and proper consideration to the manifest defects and to the serious consequences of this Order. Moreover, while it is true that the Board gave two hearings on this order, —as to the first hearing the nurserymen were misled, by the Board's declaration of the purposes and probable scope of the Quarantine Order, and the hearing, over the objections of the nurserymen, was held at the height of their selling season when it was impossible to prepare their objections in a proper manner. It is believed to be proper and necessary to call particular attention to the first of the objections just stated. The Board, in its public notice of the hearing of May 28, 1918, stated that the real scope of the proposed quarantine was to exclude plants with earth balls about their roots, and imports from "little known and little explored countries." In addressing the hearing of May 28th the Chairman of the Board reiterated this purpose. The nurserymen were consequently taken by surprise when the Board included in its Quarantine plants and trees other than those above mentioned.

ORDER NO. 37 IS OF DOUBTFUL LEGALITY

1. This order forbids, except as to a limited class of seeds and nursery stock, the introduction into the United States of nursery stock and other plants and seeds from all foreign countries and localities. Authority for this exclusion order is based on Section 7 of the Plant Quarantine Act of August 20, 1912, which, in effect, provides, that, in order to prevent the introduction into the United States of any tree, plant or fruit disease or of any injurious insect new to or not theretofore widely prevalent or distributed within or throughout the United States the Secretary shall prevent the importation of nursery stock from any specified country or locality where such disease or insect infestation exists.

It is assumed that the aforesaid limitations upon the authority of the Secretary in the promulgation of quarantines are real not fanciful. To comply with this provision the Secretary must have proof of the specific disease or pest, that such disease or pest is found in a specific country or locality and that such disease or pest is "new to or not theretofore widely prevalent or distributed within or throughout the United States."

Has the Secretary, or rather the Federal Horticultural Board complied with these statutory requirements?

So far as the nurserymen can ascertain, the proofs adduced for this sweeping exclusion order against all foreign countries are limited to the evidence taken at the hearing on May 28, 1918 and to a pamphlet styled and referred to as "A Manual of Dangerous Insects Likely to be Introduced into the United States Through Importations."

A. A stenographic report of the hearing of May 28th, 1918 discloses this interesting information; just one insect, the European mole cricket (page 13) and two plant diseases (p. 66) The White Pine Blister Rust and the Poplar canker, are listed as coming from Europe and no attempt is made to specify from what countries of Europe. For all the evidence shows, the countries of England, Holland, Belgium and France, from which ninety per cent. of all foreign importations come are not at all a source of infection or infestation. And as to the White Pine Blister Rust we already have an entirely effective quarantine. Though no evidence is given, we might add that the gypsy and brown-tail moth were not introduced on nursery stock but by a scientist who accidentally liberated the pests in Essex County, Massachusetts. Moreover, the Hessian fly, the pink boll weevil, and the European corn borer were introduced independently of nursery stock.

Again turning to the evidence of May 28, 1918, we find that all the alleged or possible trouble comes from the Orient, or little known countries, as follows:

The Japanese beetle (p. 12); citrus canker, (p. 24); the Fizi and Serah sugar cane diseases (p. 27) though they are not found in this country, and we have a strict Federal Quarantine;

one witness listed 189 Fungi (p. 30) which are unnamed as to varieties, and we are unadvised as to their harmfulness, coming from Japan, Philippines, Java, Australia, and Indo China; Oriental Peach Moth (p. 37); hag moth from Japan (p. 61); chestnut blight (p. 66); Dr. Metcalf offered to list, but did not, several thousand diseases existing in parts of the world little studied or explored (p. 67).

Other evidence was given at said hearing which can well be ruled out as being too indefinite and unresponsive to the issues under consideration, as follows:

A New Jersey entomologist testified (p. 13) that he discovered twenty species of foreign insects in soil about the roots of imported plants. It is not disclosed where these plants came from, when they came, whether the examination was made of the plants prior to contact with soil in this country, or otherwise, and, more important still, whether they were injurious insects or harmless. In the estimation of the government experts, this evidence is valueless. Mr. David Fairchild, expert of the Bureau of Plant Industry, U. S. Department of Agriculture, picturesquely testified (p. 20)

"It is not a question of balled plants from Belgium but from the upper Yanisei where we know nothing about the plants."

Doctor Beattie, of the same Department testifies (p. 28)

"We get hundreds of suspicious diseases and insects that turn out to be nothing."

The Bamboo Smut was brought to the United States by the United States Department of Agriculture from what country we are not informed (p. 28). A nematode affecting bulbs is said to have come to the United States presumably from the Orient, though we are not advised (p. 29) and the same is true of the Leopard moth (p. 38).

The case of the Japanese Beetle above referred to raises a doubt as to the value of the case against nursery stock.

On page 12 of the Record a scientist makes the posi-

tive statement that

"about three years ago (i. e. 1915) there came into our state at Riverton, New Jersey, in the soil about the roots of Japanese Iris a Japanese beetle."

In the estimation of the Chairman of the Federal Horticultural Board, this evidence is so convincing as to danger of importing plants with earth balls, not only from Japan but from "all foreign countries and localities" that he says in his memorandum to Congress found at p. 2466 Congressional Record of January 30, 1919,

"It is worthy of note that this beetle, in the opinion of the experts of this Department and of the State of New Jersey who have investigated the matter, was brought in by the Dreer Nursery with importations of Iris from Japan. The insect first appeared in the heart of the Dreer Nurseries, and has spread from this centre over an area of approximately 25,000 acres"

What are the facts in this case? In August, 1916, Mr. H. B. Weiss, Chief Inspector of New Jersey and his assistant discovered an unknown insect, later reported to be the Japanese beetle, in the corner of a branch nursery two and one-half miles from the main Dreer Nurseries. By examining the records it was shown that in 1911, five years prior to the discovery of the beetle, some Japanese Iris had grown in this particular locality of said nursery, adjacent to this nursery where the bug was discovered is a fifteen acre uncultivated field abounding in smart weed, the food the bug greatly enjoys, and next to this field is the old Parry nursery abandoned for many years. The flight of the beetle, statements of the Government experts to the contrary notwithstanding is not over two hundred yards. When disturbed the beetle does not fly, but "freezes." It is the conviction of experienced horticulturists that this beetle originated in the old Parry nursery, and not in the branch nursery in which Japanese Iris had been planted five years previously.

The economic loss to horticulture caused by this beetle has amounted to five dollars.

In our understanding of the value of scientific deductions, the conclusions of the Federal Horticultural Board in the case of the Japanese beetle are without merit. They require as much credulity as it would take to establish the truth of Psychic Phenomena by the seances of a Palladino. The nurserymen enquire, as they think the Secretary must, if the other proof upon which the Board rests its reasons for Order No. 37 is of the same circumstantial, unscientific and improbable character as this Japanese beetle evidence.

B. The only other evidence offered at this hearing on May 28th, 1918 to support Quarantine Order 37 is the Board's reference to the aforesaid "Manual of Dangerous Insects."

While this Manual is an admirable and well arranged catalogue of insect pests liable to be introduced into the United States, it does not, nevertheless constitute a defense of Quarantine Order No. 37. Many of the pests mentioned are admittedly liable to be introduced on other materials than plants. Many of the insects or spiders are found in the Orient, Australia, or little known countries. There are not sufficiently specific charges against countries of Europe like Holland, Bel-

gium, France and England from which this country derives 90% of all its importations. Moreover, there is no evidence or claim that these pests cannot be detected by inspection either in the foreign countries or on entry to this country, in the manner proposed in a later title of this statement. For example, there is not a single charge as to trees and plants against Canada, Newfoundland, and many other countries, nor against the Kentia palm which is only grown on a single Island. Many of the pests listed have nothing to do with plants, trees and shrubs, nor are these articles charged as liable carriers of the insects.

Inasmuch as Order 37 excludes nursery stock from all foreign countries and localities it is necessary, we repeat, under the limitations of the Secretary's power to quarantine, to prove that specific countries or localities are infested or infested with "tree disease or injurious insect new to and not theretofore widely prevalent in the United States."

The nurserymen cannot escape the conclusion that Order Number 37 is designed to avoid the statutory limitations of the authority to quarantine. In addressing the hearing of May 28, 1918 the Chairman of the Federal Horticultural Board stated,

"From the fact that we know nothing or very little of the enemies, our inspectors are unable to make the same sort of inspection which they would of plants with respect to which they would know what to look for, and therefore there is much greater risk of diseases and insects coming in."

This rather clearly indicates an intention to quarantine against something unknown, "on suspicion" as we have heard the entomologists say in their propaganda, which is the cause of this Quarantine Order No. 37. The Board has in effect made a new law,—has taken a short cut as to foreign quarantines, whereas, as to domestic quarantines, the Board had, in order to quarantine "on suspicion," to amend the Plant Quarantine Act.

American nurserymen are as willing as other loyal American citizens to exclude foreign grown horticultural products if there is a real demonstration of the necessity to employ such drastic measures. They, however, are unwilling to stand silently by and see a quarantine order, such as No. 37, imposed which is unsupported by credible or satisfactory evidence, or is clearly contrary to the law. If exclusion of foreign grown horticultural products, for any reason not now authorized by the Federal Plant Quarantine Law is necessary, the nurserymen feel that the issues should be decided by the law-making power, not by a Board of administrative officers, whose orders may be issued or revoked at will, creating that instability which is a sure cause of preventing American Nurserymen from taking up at heavy expense and for long periods of time the difficult task of attempting to grow in America what they now find it impossible to grow.

2. As hereinafter referred to, the importer of ornamental stocks is discriminated against, the importer of fruit stocks having free entry of his merchandise. Does this appear to be the Equal Protection of the Laws assured to the citizens by the Federal Constitution?

3. The Federal Horticultural Board at the hearing on May 28, 1918 ruled out any discussion as to the legality

of the proposed quarantine order, on the ground that the Department's Counsellors had justified the quarantine, and for the further reason that the courts could decide the legal question. In such an important matter as this quarantine it would seem more fair at least to have allowed a brief statement of a debatable legal question, and not force interested persons to resort to the expense, delays and annoyances of an appeal to the Courts. It is provided moreover, by the Plant Quarantine Act, and a condition precedent to the promulgation of any valid quarantine, that persons shall have a right to be heard. If the subject matter of their evidence is censored or restricted, it is respectfully suggested that interested persons are deprived of a right given them by law, and the order issued in consequence of said hearing is charged with invalidity.

QUARANTINE ORDER NO. 37 IS UNNECESSARY.

Before excluding foreign grown plants propagated in such countries as Holland, Belgium, France, England and Ireland, the Federal Horticultural Board should have considered other methods of protection.

In his defense of this Quarantine Order No. 37 the Chairman of said Board stated in a Memorandum found on pages 2464 to 2466 of the Congressional Record of January 30th, 1919 as follows:

"With respect to the actual condition of nursery stock and other plants hitherto received from foreign countries it is appreciated that the countries which have been most concerned in such exports to the United States have established inspection and certification service with the result of very greatly reducing the amount of infestation on such exported plants."

In the opinion of practical nurserymen it is perfectly possible for the United States Department of Agriculture to make further regulations of inspection to cure any alleged present evils or risks. The representatives of foreign governments have expressly and recently agreed to provide further inspections. It is also possible for experienced United States inspectors to be placed in the districts of Europe where this country's horticultural supplies come from. As those districts of England, France, Belgium, and Holland are very circumscribed and nearly 90% of this country's imported stocks comes from these areas it would be an easy task for these Federal Inspectors to inspect soil as well as plants and only stock from clean nurseries could be certified for export to the United States. For illustration all of the azalea indica imported by American florists for forcing purposes is grown in an extremely limited field near the city of Ghent, Belgium.

Azaleas imported by American nurserymen are nearly all grown in Boskoop, Holland. Ninety per cent. of the small French ornamental stock is grown in Orleans and Angers. Foreign nurserymen would be only too glad to submit to this voluntary inspection and restriction. This plan would meet the objection to earth balled plants which was the only regulation of European exports proposed in the notice of hearing and at the hearing of May 28th.

Federal and state inspection in this country could be immeasurably improved.

A follow-up inspection of importations could be initiated.

Nurserymen submit that nursery stock has been coming from the above described countries of Europe for very many years and without infestations or infections or that any pests or diseases have been eradicated by the nurserymen themselves, or as a result of official inspection and control under the Federal Plant Quarantine Act or under state inspection. Since the passage of the Plant Quarantine Act in 1912 we have the record that not one single tree disease or dangerous plant disease has been introduced into this country on nursery stock.

Order No. 37 is a confession of a breaking down in Federal inspection or in the promulgation of satisfactory inspection regulations or in securing international agreements. These failures, however, should not be the excuse for exclusion of valuable trees and plants.

THE ORDER IS UNFAIR

Order No. 37 permits entry of six bulbs, but excludes many bulbs of the same appearance or characteristics grown by the same growers, in the same fields and under entirely similar conditions. If there is any reason for this discrimination, it is not known to nurserymen. It is not true that "these excluded bulbs are less important and (are) miscellaneous importations coming from widely scattered sources over the world." There are many roots or corms just as clean and easy of inspection as the favored bulbs. A little effort by the inspectors could protect this country from the rarely appearing diseases or pests.

Even the admitted bulbs cannot come packed in soil—a serious limitation because this packing takes up moisture and prevents freezing in transit. This packing dirt is or can be sterilized, and in no event is it the soil in which the bulbs grew.

Rose stocks for propagation are admitted but rose plants, the finished product, are excluded, on what ground it is impossible to appreciate for never has any pest been detected on imported rose plants. The Board has wholly escaped the consequences of this unnecessary quarantine. Since the war, this country has not been able to import rose plants resulting in the wholesale price rising from eight to ten cents apiece to today's price of twenty-five cents. If Order No. 37 is not revoked, the price will probably be affected thereby.

If fruit stocks, seedlings and seeds may be imported under this order, there is not the slightest more danger in admitting Norway maples, lindens, beech, birch, sweet shrub mock orange, high bush cranberry, and other beautiful ornamental stocks. All these stocks are produced from seed and imported when two years old, being grown in the same nurseries and under exactly the same conditions as the Rosa Rugosa.

The Board bases its right of discrimination between nursery stocks on economic grounds. The Board finds that there is danger from imported fruit stocks and seedlings, but admits them because this country must have them or lose its best orchards. But ornamentals are excluded under the mandatory words of section seven of the Plant Quarantine Act. The nurserymen fail to see a justification for this discrimination by executive action.

It is certainly difficult to convince friendly nations of the justice of this order.

IMPOSSIBILITY OF SECURING DOMESTIC GROWN ORNAMENTALS

Azaleas, Rhododendrons, boxwood, bay trees and many other slow growing plants excluded by this order and very much desired by the American people cannot be successfully grown in commercial quantities in this country. This is a question of lack of expert as well as common labor, of capital, and of securing customers to pay the exceedingly high prices for these domestic grown stocks. Rumors of American grown stocks are unfounded.

POLITICAL OBJECTIONS

This Order No. 37 has already raised vigorous protests from several friendly foreign governments. An order which tells a nation that it can ship fruit stocks and seeds, although liable to diseases and pests, because such fruit stocks are actually necessary to this country, and excludes healthy stocks of ornamentals is bound to be considered unjust and unreasonable to such foreign nations. Since the issuance of this Order No. 37, word has come from official sources that because of this order exportations of fruit stocks and seeds to America will be stopped. Foreign nations have not objected to some twenty Federal orders against specific diseases or pests but this order is an entirely different matter.

THE CASE FOR THE AMERICAN CONSUMERS

Congressman Mann appears to be the only person who has directly appeared for the American Consumer. The General Public has not yet heard about this order which will unnecessarily deprive them of hundreds of beautiful vines, shrubs, and plants. When they do appreciate this loss, there will be an insistent demand on Congress for the reason why an administrative board has such plenary legislative powers.

WHEREFORE this Association requests the Secretary of Agriculture to revoke Order No. 37, and, to promulgate further orders providing for a more efficient foreign and domestic inspection system. This Association is firmly convinced that American citizens are entitled to demand that the administrators of the Plant Quarantine Act of 1912 shall exhaust all feasible methods of inspection and control before a resort to the general exclusion of foreign grown horticultural products.

Respectfully submitted,

AMERICAN ASSOCIATION OF NURSERYMEN,

By Thomas B. Meehan,

Dresher, Pennsylvania.

Acting Chairman Legislative Committee.

Curtis Nye Smith,

Counsel, American Association of Nurserymen.

February 14, 1919.

DEATH OF JOHN B. MOREY, JR.

Just as we go to press, we are advised of the death of John B. Morey, Jr., of Dansville, N. Y., which occurred early this week.

Mr. Morey had been ill for some time with tuberculosis of the throat and suffered intensely.

Funeral services were held in Dansville, Tuesday, March 4.

A full account of Mr. Morey's life will appear in the April number of the National Nurseryman.

ANNUAL DINNER OF THE NEW YORK STATE NURSERYMEN'S ASSOCIATION

Sponsored by The Ananias Club—A Get-together Meeting to Study the Opportunities in the Reconstruction Period for Nurserymen

That was the banner under which some seventy-five nurserymen of Rochester and vicinity got together on the evening of February 22nd at the Seneca Hotel in Rochester, New York. The dinner was arranged by the Rochester Nurserymen in connection with the Executive Committee of the Nurserymen's Fund for Market Development. The program was as follows:

Toastmaster—WILLIAM PITKIN

Introduction—C. H. Perkins, 2nd, Newark, N. Y.,

President New York State Nurserymen's Association.

Reminiscences—James Pitkin, Newark, New York.

Market Conditions—John H. Dayton, Painesville, Ohio.

Empire State's Place in the Nursery Industry—

John Watson, Princeton, N. J., Chairman Executive

Committee, Nurserymen's National Service Bureau.

Nurserymen's National Service Bureau—F. F. Rockwell, New York City, Manager of the Development Campaign.

Power of Co-operation—Robert Pyle, West Grove, Pa.,

President Ornamental Growers' Association.

The National Viewpoint—J. Edward Moon,

Vice-President, American Association of Nurserymen.

Pointers on a Billion Dollar Industry—Louis Allen,

President Allen Sales Corporation, New York.

C. R. Burr, W. J. Maloney, J. P. Rice, T. J. Smith, C. J. Maloy and other speakers expected.

Entertainment Committee: James Pitkin, Chairman; C. H. Perkins, 2nd, C. R. Burr.

Arrangements: C. J. Maloney.

Some of the old-timers said that this was the biggest meeting of Nurserymen that Rochester had ever turned out. The Geneva men came over in force.

As the meeting of the New York State Nurserymen lasted until about six o'clock before the guests for the Ananias dinner were seated, but that was the only thing that was slow about the whole proceeding. Mr. William Pitkin started the ball rolling with a series of remarks which did credit to the memory of the Ananias Club which has been famous in nursery circles.

Mr. C. H. Perkins, President of the New York State Nurserymen's Association, interrupted the songs and general festivities long enough to introduce the subject of the new Federal Horticultural Board quarantine preventing the shipping of a long list of products including "gladiolas, dahlias and other perennials" outside of the states of New York and Massachusetts. After some discussion condemning the methods which the Federal Horticultural Board had been following, it was voted by the members of the New York State Association present to send a committee to Washington for the hearing on this proposed embargo to see if it would not be possible to have the embargo restricted to infested districts rather than to the entire state. Mr. James Pitkin, of Newark, New York, gave some "reminiscences" for the year of 1950, or thereabouts, looking back to the days before the nurserymen were organized, and still had to make some

effort to sell their own goods instead of merely attempting to grow enough stock to fill the orders turned over to them from the central office of the Nurserymen's National Service Bureau. He also described the old days when they did the budding and other nursery operations in the field before important efficiency methods were introduced making it possible for the propagator to sit still in an easy chair and have everything with which he had to work passed before him on a chain conveyor! Mr. John Dayton of the Storrs & Harrison Company of Painesville, Ohio, read a carefully prepared paper on Market conditions. He described the several classes of customers from the one who refuses to be satisfied with anything and wants his money back—with interest—to the man who writes in and says that he has been using so-and-so's plants for the last fifty years and has never known one to die or fail to bear a good crop, encloses a check for this year's order and also the names and addresses of all his relatives and friends whom he has advised to buy their plants and seeds where he does. In



F. F. Rockwell

conclusion he made a number of very favorable suggestions as to the necessity of closer co-operation on the part of the nurserymen, particularly in regard to the standardization of retail prices and the classification of buyers. The part which the Empire State has played in the development of the nursery industry of this country was covered very thoroughly and very interestingly by Mr. John Watson, President of the Princeton Nurseries at Princeton, New Jersey, and Chairman of the Executive Committee in the campaign for Market Development. He ended with a strong plea for the advantages to be gained from greater advertising of the products of the nursery industry as a whole and the possibility of doing this through a co-operative campaign.

The organization of and the activities, present and

proposed, of the Nurserymen's National Service Bureau were covered in their various phases by F. F. Rockwell, of New York, Manager of the Nurserymen's National Service Bureau, Mr. Robert Pyle of West Grove, President of the Ornamental Growers' Association, and Mr. J. Edward Moon, of Morrisville, Pa., Vice-President of the American Association of Nurserymen.

Mr. Louis Allen, President of the Allen Sales Corporation, of New York City, gave a talk on what other industries had been able to accomplish through co-operative effort, and an account of how he had built up the sales of the Pyrene Manufacturing Company from less than four hundred thousand dollars a year to over seven million, largely as the result of a co-operative campaign in which four concerns, all of whom were manufacturing some automobile accessory designed to make automobile driving safer, got together to convey their story through co-operative publicity to the general public. He emphasized the fact that many other industries had had problems and difficulties which seemed just as difficult of solution, in their efforts to get together when they were trying to organize, as those which confront the nurserymen at present. He voiced his confidence that the nurserymen would be able to succeed when once they realize the importance of working for the industry as a whole as well as for their individual businesses. Following Mr. Allen's talk there was a discussion on the general proposition of Market Development with questions on the various details such as the use of the proposed "little blue tag" guaranteeing "stock true to name, free from disease and delivered in good condition," the syndicated articles to be furnished newspapers, the use of illustrated lectures, etc.

Manager Rockwell stayed in the vicinity of Rochester and Geneva for a couple of days visiting the individual nurserymen and explaining in detail points in connection with the Market Development work which had not been brought out at the dinner.

One of the problems in connection with the work of the Market Development campaign, of course, has been to find a basis on which subscriptions to the campaign should be made. The three proposals thus far have been an assessment on the total amount of business done; an assessment for each acre of nursery stock grown; and an assessment on the amount of stock handled regardless of prices received for same. So far no great majority of nurserymen have endorsed any one of these plans, and objections to all of them have been made by some growers. The Committee hope to have worked out before the June convention, a plan which will be generally acceptable.

Any suggestions in regard to this matter will be favorably received by Mr. Rockwell whose headquarters are at 220 West 42nd Street, New York City.

Ornamental Trees and Shrubs of Merit for New England

Read by Mr. Wm. H. Judd of the Arnold Arboretum at the Eighth Annual Convention of the New England Nurserymen's Association held in Boston, January 28 and 29, 1919

I WANT to try to take you through the year with a selection of a few of the best and most attractive flowering trees and shrubs that should be more commonly seen and grown in gardens. Some of the subjects to be named are not new, but certainly are as good as many of the new ones and may have been overlooked by the growers of ornamental trees and shrubs.

During December and January, we have in flower, *Hamamelis Vernalis*, a native of Missouri and Arkansas. This is a small bushy shrub and is covered with deep yellow strap-shaped flowers smaller than those of the common witch hazel that flowers in October. Coming to the end of January and in February, we have *H. Mollis* in flower, probably the best and handsomest of these shrubs in the size and color of its flowers which are a bright yellow with a claret colored calyx. The foliage is good and the shrub is perfectly hardy and vigorous and no garden is complete without a shrub or two of this and the previous mentioned winter flowering variety.

Belonging to the same family is *Corylopsis Gotoana*, the leaves of which resemble a Witch Hazel but the fragrant canary yellow flowers are produced in drooping racemes. The shrub is tall and spreading with sub-erect branches, and flowers in May.

The first shrub to unfold its leaves in Spring is *Prinsepia sinensis*, a perfectly hardy tall and vigorous shrub with spreading spiny branches and clusters of bright yellow flowers produced in the axils of the leaves. The berry like fruit that comes later is about the size of a cranberry, and is red.

One of the handsomest of the Asiatic deciduous rhododendrons is *Rhododendron Schlittenbachii*. A perfectly hardy shrub and in early May bears beautiful large flesh pink flowers. It should be planted in the shade for the flowers are of a thin texture and fade out quickly in the sun. Several hundred of seedlings were raised last year and it should soon become a popular variety, although in one or two Massachusetts gardens are some fair sized plants already.

Rhododendron coreanum (R. Poukhanensis) has been called to your attention before. This is a delightful low, compact bush with a profusion of rosy mauve fragrant flowers produced every May and the bush is never injured by any drought or heat. The common variety "Yodogawa" is only a double flowered form of this species.

Rhododendron mucronulatum is an upright deciduous shrub that never fails to flower every year about the end of April before the foliage appears. It bears pale rose colored flowers that last in good condition for nearly three weeks.

Rhododendron Carolinianum which flowers in June is one of the best broad leaved evergreens recently introduced and never fails to give a crop of its pale rose pink

clusters of flowers, either in sun or shade every June.

There are numerous good varieties of flowering apples, too many to describe, but a selection of one or two of the best include *Malus Arnoldiana*, supposed to be a hybrid between *Malus cerifer* or *Malus floribunda*, both its parents being hybrids. It is a low, wide spreading bushy tree with long arching branches, extremely beautiful when completely covered with its large flowers that change from rose to white and in the fall are covered with red fruits. Another of more tree-like habit is *Malus Sieboldii calocarpa*, handsome in spring or autumn. The flowers are pink and white and the fruit which covers the bush is bright scarlet. The foliage is lobed and this variety used to be called *Malus toringo incisa*. The double flowered form of *Malus ioensis* known as Bechtels Crab should be seen more than it is for the beautiful double pink flowers like small roses always give considerable pleasure and interest to the public.

The new roses are numerous but one of the best introduced from China is without doubt *Rosa Hugonis*. The long arching branches are completely covered from end to end with beautiful pale yellow flowers. The shrub is quite hardy and grows fast, and is one of the earliest to flower, often by the middle of May. Another new and interesting rose is *Rosa omeiensis*, a vigorous tall grower having the young stems covered with broad bright red prickles, and bears pure white fragrant flowers with only four petals. Its name is derived from the sacred mountain of Omei in China where it is common, and promises to be a valuable plant here on account of its hardiness. It should also make a good hedge plant. It flowers the middle of May.

Rosa spinosissima altaica, although an old variety of the Scotch rose, is one of the best and deserves to be grown more. It never fails to flower every year about the end of May, and is one of the best and hardiest of all the single flowered roses that can be grown in this climate.

Rosa multiflora cathayensis should be taken hold of by the hybridist. It is a climber and Chinese representative of the well-known multiflora, but bears large clusters of single pink flowers with a centre of yellow anthers flowering about the middle of May. It fruits freely and is one of the parents of the Crimson Rambler.

The cotoneasters have recently attracted the most attention of any of the newer Chinese shrubs. There are about fourteen varieties useful as decorative shrubs especially so as they fill a double purpose by being showy both in flowers and fruit. The very best ones include first of all, *Cotoneaster racemiflora soongorica*. It is a tall, much branched, wide spreading shrub and during May the slender arching branches are closely packed with clusters of white flowers in upright trusses, and in the fall the shrub is completely covered with bright red

fruits and is probably the most attractive shrub in the Arboretum.

A very similar shrub is *Cotoneaster multiflora calocarpa*; but not so densely branched. The stems are spreading and arching, it has bluish green foliage and produces erect clusters of white flowers followed early in the fall by large red berries that drop off early. With this one the flower is the most attractive part as it is with *C. Hupehensis*. This is a tall wide spreading much branched shrub, in May looking like one huge bush of *Spiraea*. This is the handsomest of all in flower. The fruit on this variety is large and red, but is not very freely produced as yet. Other good varieties are *Nitens*, with shiny small foliage and a profusion of small black fruit; *Cotoneaster dielsiana* has small round red fruit in clusters, and *Divaricata*, with large oval red fruit that remain on till December. *Apiculata* and *C. Adpressa* are fine for the rockery.

Among diervillas the most attractive of all the numerous hybrids and species, *Dierville florida venusta* takes first place. This variety was introduced from Korea by Mr. Jack and grows about five feet tall and almost as wide and every year all the branches are closely covered with the long tubular rose pink flowers. This ranks as one of the best new decorative shrubs of recent years and is quite hardy.

Among viburnums there are two of merit, namely, *V. Theiferum* and *V. Hupehensis*. The former is a tall erect growing shrub with thick, narrow foliage, and unattractive flower clusters but during October the fruit is very showy being produced in large pendulous clusters, at first of a light orange color changing later to scarlet. *V. Hupehensis* is similar in habit but has smaller and thinner leaves and bears in fall large drooping clusters of large red berries, as large as those of *V. opulus*.

For its fragrance in flower, there is no more delightful shrub than *Syringa pubescens*, equally as attractive as any of the popular forms of lilac and should be better known than it is. It is a tall shrub and bears clusters of long tubular flowers of pale lilac color that fills the surroundings with a delightful perfume. It is a native of North China and flowers every year in June.

Neillia sinensis is a Chinese shrub worthy of attention similar in habit of foliage to a *Physocarpus* and has reddish brown bark, and slender drooping branches. At the end of every branchlet is a raceme of bell shaped clear pink flowers during June. This is considered by some people to be one of the most attractive new Chinese shrubs.

During the month of July there is no more attractive bush than *Cytisus nigricans*. It is a compact little bush about three feet high and quite hardy, being every year covered by long erect racemes of flowers carried above the foliage, of a bright yellow color and freely produced.

Deutzia hypoglauca is one of the hardiest and best of the new species from China. It is a tall shrub with erect habit, and produces very pretty clusters of white flowers.

Indigofera amblyantha must not be forgotten as one of the shrubs that gives a continuance of flowers for three months, something decidedly in its favor. This is a tall shrub with long slender stems and small foliage and bears axillary racemes of small rose pink flowers that continue to expand from the end of June till October.

Coming to the fall, one of the most attractive trees is *Acanthopanax riciniifolia*. This is a large tall tree with stems and branches covered with stout prickles and bears large lobed foliage very similar to that of the Castor Oil Plant. This tree is never attacked by any insect, grows rapidly, and is always attractive, and never fails to flower every fall with large terminal flat topped clusters of greenish white flowers, followed later by black fruit.

Continued in April Issue

OUR TRADE LIST FOR 1918-1919 HAS BEEN MAILED
If you have not received a copy and wish one it will be sent on request to nurserymen and florists only.

COTTAGE GARDENS NURSERIES

(OF EUREKA, CAL.)

Address all correspondence to BOX 543, SAN JOSE, CAL.

FOR SALE

FOR SALE

Peach Trees — Kieffer Pear — Apple Trees.

W. T. MITCHELL & SON,
Beverly, Ohio.

WANTED

NURSERY FOREMAN

must be well versed, sober and industrious, to take charge of nursery and propagation.

THE BREITMEYER LANDSCAPE and NURSERY CO.,
Detroit, Mich.

WANTED—Man, experienced in orchard and nursery work. Married man preferred. Good position to the right party. Give details and salary expected. Address

S. JANKOWSKY,

Tulsa

Okla.

HELP WANTED—Nurseryman capable of handling men and producing results. A good opportunity for the right man.

THE WAGNER PARK NURSERY CO.,
Sidney, Ohio.

AMERICAN FLORIST'S TRADE DIRECTORY

Price \$3.00, Postpaid

For Sale By

NATIONAL NURSERYMAN PUB. CO. Inc.,
HATBORO, - - - PA.

Under the present conditions we find the mail is often delayed and we ask our patrons to please send advertising matter promptly to our office at Hatboro, Pa.

APPLE TREES, Cherry, Pear and Peach No. 1, extra fine, at about half of wholesale prices.

Also soft Maple, Berry plants, and Blackberry Root cuttings, very cheap.

GRAY'S NURSERY,

Salem

Ind.

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.

147 Summer St. Boston, Mass.

CHAMPION NURSERIES, Perry, Ohio

Offer the Following Stock

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6. to 8 ft., 8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4 ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet, California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio

We have more of the following fruit trees than we will need for our retail trade the coming spring. If interested, please write for prices and a copy of our Surplus List:

APPLES

Alb. Pippin
Alexander
Baldwin
Bellefleur
Ben Davis
Car. Red June
Cornell's Fancy
Dela. Winter
Dickinson
Dominie
Duchess of Old.
Ey. Colton
Ey. Harvest
Ey. Ripe
Ey. Strawberry
Fallawater
Fall Pippin
Gano
Golden Sweet
Greenville
Grimes Golden
Hub. Nonsuch
Jefferis
Jonathan
King
Lady
McIntosh Red
No. Spy

Nyack Pippin
Ohio Nonpareil
Paragon (or Mam. Black
Twig)
Pawaukee
Rambo
Red Astrachan
Red Beitigheimer
R. I. Greening
Roman Stem
Rome Beauty
Smith's Cider
Spitzenburg
Stark
Starr
Strode's Bghm.
Summer Pearmain
Summer Rambo
Sutton's Beauty
Townsend
Twenty Ounce
Wagoner
White Ohio Pippin
Winter Banana
W. S. Paradise
Wolf River
York Imperial

PEARS

Bartlett
Beurre Clairgeau
Beurre d'Anjou
Belle Lucrative
Butter
Clapp's Fav.
Doyenne d'Ete
Duchess d'Ang.
Howell

Idaho
Keiffer
L. B. de Jersey
Manning's Eliz.
Osband's Summer
Roosevelt
Rossney
Sheldon
Dana's Hovey

1000 Houghton Gooseberries, No. 1
3000 Downing Gooseberries, No. 1

HOOPES, BROS. & THOMAS COMPANY

The West Chester Nurseries

West Chester, Pa.

ROSES

ELMER BROS. NURSERY

Grows all kinds of delivery. Our **ROSES** on contract for future are all budded on the Manetti Stock. Prices on grown on contract are very reasonable, as we are growing them in large quantities. Santa Clara Valley land and climatic conditions are ideal for Rose growing.

Delivery can be made from October to March 1.

The roses are thoroughly hardened and matured by October, 1, for safe shipment.

We are the largest growers of budded roses in the West. Roses from our nurseries have been shipped throughout the East arriving in good condition.

No contract is too large or too small as we are growing hundreds of thousands of roses.

Send us your budding list for quotations. We make one price for all varieties.

Write to us at once, as we are preparing our budding list for the summer budding.

ELMER BROS. NURSERY, 70 S. Market St., San Jose, Calif.

When writing to Advertisers please mention the National Nurseryman.



Are prices all shot to pieces?



What Do You Mean Get Busy?



Is the business in general, in bad odor?

Before we go any further, let me explain that this talk has to do with trying to bring about better conditions in the Nursery business.

Conditions that will make your business more pleasurable and decidedly more profitable. As the business, as a whole, now stands, you know that a lot of things are dead wrong—let's talk them over.

Let's see what can be done about it.

1. There is no bottom to prices. Competition is without regard to actual cost of production. Prices are often quoted to customers lower than to the trade.

ISN'T THIS TRUE?

2. There isn't near the money there might be in the business. Consider the large amount of tied up capital invested. Think of the long hours and the skill demanded. Look at the slow turn-over and risks you must run, that are absolutely beyond control. Compare your profits with those of other industries, and you see at a glance, they are way too low.

ISN'T THAT YOUR EXPERIENCE?

3. There exist no "Standards of Practice."

By that, I mean those unwritten laws, customs, and codes of honor, which are a large part of any sound business. They have never been standardized among nurserymen, as in most other industries.

As a result—there exists uncertainty, suspicion, quoting of trade prices to those not entitled to them; and any number of other bad practices.

ISN'T THAT ALL SO?

WELL THEN—WHAT'S WRONG?

It isn't because you haven't worked hard, that results haven't been better.

It isn't because you have not been thrifty, that you haven't more money in your sock.

Still, year after year, you have been expecting better things.

But they haven't happened like they have been happening in other lines of business.

Where then, have the cogs slipped?

Has it ever occurred to you that the trouble is that your time and effort has been mostly spent along go-it-alone lines?

That you have not done your share to help organize the business as a whole; just as hundreds of other industries have been organized so successfully.

Where, for example, would the California Fruit Growers be today, if they had not organized, standardized, and advertised?

Why have the Florists organized and advertised?

Why have they planned to spend \$100,000 this

year, instead of the \$40,000 they did last year? What's the use of standing back, and all the time growling about the "crooks in the business," and how "prices have gone to the dogs," and still never do a doggone thing to better things?

The Nurserymen's Service Bureau was organized to help you, to help others help you.

Are you going to sit still and not profit by the services of this Bureau?

Do you realize what it's going to mean to use The Little Blue Tag?

Let me send you particulars of just what the Bureau is, and exactly what it is both doing and going to do.

That's what I mean by "Get Busy."

Manager.

NURSERYMEN'S NATIONAL SERVICE BUREAU

220 West 42nd Street



New York City

When writing to Advertisers please mention the National Nurseryman.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed. Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

Southern Nurserymen Attention

There will be no Raffia for budding this Spring.
What will you use?

Try "BUDTIE"

10,000 lbs. sold to nurserymen last year.

Write for samples and prices.

Thomas B. Meehan Co.

INTRODUCERS OF "BUDTIE"

DRESHER

PENNA.

PEACH SEEDLINGS AND CUTTINGS

We have for quick shipment 30,000 Peach Seedlings 3-16 and up. In cuttings we have Brown Turkey and Celestial Fig, Oriental Plane, Carolina and Lombardy Poplar, Willow, California and Amoor River Privet, Spirea, Deutzia. Prices upon application.

THE CURETON NURSERIES

Austell, Georgia

FOR YOU

A general line of Nursery Stock: Fruit, Shade and Ornamental Trees, Evergreens, Asparagus, Rhubarb, California Privet, Oriental Planes, Pin Oaks in carload lots.

Send us your list of wants for prices

Franklin Davis Nurseries, Inc.

JOSEPH DAVIS, General Manager.

404 W. Baltimore Street

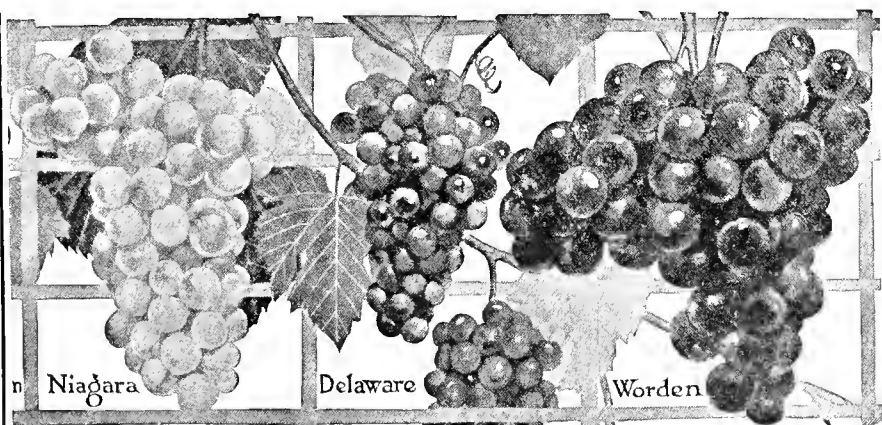
Baltimore, Md.

U. S. Trees grown by U.S.

Small Evergreen Trees for Forest-planting and lining-out
WE RAISE OUR OWN TREES FROM SEED

Write for our price list.

Keene Forestry Association, KEENE N. H.



T. S. HUBBARD CO.

Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting

Established 1866

Send for Catalogue

LOOK FOR IT

The first of last month we issued our general wholesale trade list. Did you get your copy?

If not, a postal will bring one to your desk. There are lots of interesting offerings in this list and every nursery buyer should have a copy at hand; 28 full pages pricing complete assortment for you to choose your shorts and wants from.

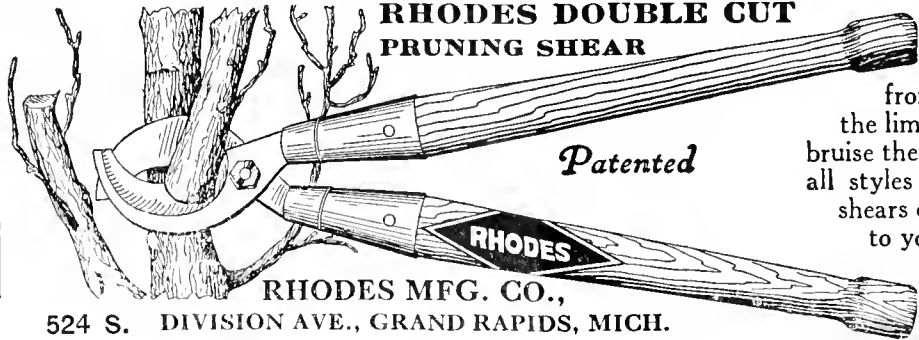
Write today if you cannot locate your copy.

SHENANDOAH NURSERIES

D. S. Lake, Pres.

SHENANDOAH, IOWA

Subscribers to "Nurserymen's Fund for Market Development."



RHODES DOUBLE CUT PRUNING SHEAR

Patented

RHODES MFG. CO.,
524 S. DIVISION AVE., GRAND RAPIDS, MICH.

THE only pruner made that cuts from both sides of the limb and does not bruise the bark. Made in all styles and sizes. All shears delivered free to your door. Write for circular and prices.

When writing to Advertisers please mention the National Nurseryman.

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

Best sorts in new and standard

ROSES

THE LEEDLE FLORAL COMPANY®
SPRINGFIELD-OHIO.

2 1/4-inch
pots for
lining
out

4-inch
pots for
short
lists

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobalan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades, also
Grape and Currant Cuttings and Light Grade of Vines for
Lining Out in Nursery Rows
WRITE FOR PRICES

F. E. Schifferli, - Fredonia, N. Y.

HARDY PERENNIAL PLANTS

Phlox, Iris, Delphiniums, Shasta Daisies and many other
perennials. Send us your want list for prices or ask us for
wholesale price-list.

WILLIAM TOOLE & SON,
Hardy Plant & Pansy Farm,

Baraboo

Wisconsin

HARDWOOD CUTTINGS PRIVET ALL KINDS

We make a specialty of the above and can give you extra
good service. Write us.

OAKLAWN NURSERY,

Huntsville

Ala.

EVERGREENS

SEEDLINGS TRANSPLANTS

Large stock—Reasonable prices. If you didn't receive our
Trade List, ask for it.

EVERGREEN NURSERY CO.

Evergreen Specialists

Sturgeon Bay, Wis.

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing

Ask for Prices.

We are the printers of this Magazine

20,000 DEPENDABLE

TWO-YEAR NO. 1 CONCORD GRAPE VINES
ready for shipment

Stock is A No. 1 and will satisfy the most particular
customer. Get busy and write.

R. B. GRIFFITH

FREDONIA, N. Y.

STRAWBERRY PLANTS

Summer and Fall bearing varieties, shipped to you or
direct to your customer under your tag.

Plants and service that pleases both you and your trade.

Let us quote you

V. R. ALLEN,

59 Lane Avenue

Seaford, Del.

SHADE TREES

We have a fine lot of Ash, Elm, Box Elder, Maple, Catalpa
and HACKBERRY. Let us quote you prices on your wants.
Can furnish them in carload lots.

GURNEY SEED & NURSERY COMPANY,
Yankton, South Dakota.

Surplus Trees For Quick Shipment

Oriental Plane, Carolina and Lombardy Poplars, Maples,
Catalpa Speciosa, Babylonian Willow, all sizes, California,
Amoor River, Ciliatum and Ibota Privet, Spirea, Deutzias,
Altheas, Lilac, Crape Myrtle, Forsythia, Junipers, Thuyas,
Biotas, Roses, Walnuts, Pecans, in any quantity and sizes.
We guarantee satisfaction.

THE CURETON NURSERIES

Austell, Georgia

CALL'S NURSERIES PERRY, OHIO

We have the following stock in surplus:

10,000 Peach 9-16 inches and up
5,000 Peach, 7-16 to 9-16 inches
5,000 Houghton Gooseberries, 3 years
5,000 Barberry thunbergi, 18 to 24 inches and up
5,000 Hydrangea paniculata grandiflora, 2 to 3 feet.
500 Hydrangea paniculata grandiflora, Tree form
50,000 California Privet, 18 to 24 inches
American Elm, European Sycamore and Norway
Maple in all sizes and quantities.

The above stock is as good as can be grown. Graded
to the highest standard and will be priced right to any
Nurseryman interested.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring
orders or if you wish to increase your planting in nurseries,
we can supply you with genuine PROGRESSIVE Everbearing
plants, guaranteed to be TRUE TO NAME and handled so as
to reach you in best of growing condition. Write for prices.
We have been growing and breeding the Everbearing straw-
berries for the past eight years and have many new varieties
growing in our experimental grounds that are not yet for sale.
We invite a personal visit to our grounds during fruiting sea-
son, preferably during August or September. The latch string
is always out.

THE GARDNER NURSERY CO., Dravner 103, Osage, Iowa.

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials.

Send us your want list.

Inspect our stock.

The

Established 1841

Gardeners' Chronicle

is the Leading Horticultural Journal in the World

SUBSCRIPTION IN U. S. A., \$4.20
YEARLY POST FREE

Specimen Copy and Catalogue of Horticultural Books post free on application to the publisher----

The Publishers, 41 Wellington St.
Covent Garden, LONDON, W. C.

Charles Detriche, Senior

ANGERS, FRANCE

Grower and Exporter of Fruit-Tree Stocks, Forest Tree Seedlings, Rose Stocks, Shrubs, Vines, and Conifers for Nursery Planting.

For all information as to Stocks, prices, terms, etc., address

Jackson & Perkins Co.
(SOLE AGENTS)
NEWARK, N. Y.

A Large Stock of Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES and SHRUBS. All stock clean and thrifty, the best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1919

Apple, 2 year, fine Ben Davis, Black Ben Davis, Gano, Delicious, Lowry, Rome Beauty; Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; Evergreens—Norway and Hemlock Spruce, Deodar Cedars, Irish Junipers, California Privet, 2, 3, and 4 year; Sugar Maple Seedlings, six inches to ten feet.

Write us for prices.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"



Strawberries
Raspberries
Blackberries
Dewberries
Berberry

Currants
Gooseberries
Grape Vines
Privet
Spirea

Rhubarb
Asparagus
Horseradish
Hardwood Cuttings
Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE

OHIO

We sell to THE TRADE only, and make a specialty of

OREGON CHAMPION GOOSEBERRY PERFECTION CURRANT CLEAN COAST GROWN SEEDLINGS

We also have growing for fall delivery a large assortment of general nursery stock, including Fruit, Shade, and Ornamental trees, Roses, Etc.

Head Quarters for Nursery Supplies.

Correspondence invited.

Portland Wholesale Nursery Co.

122 1/2 Grand Avenue, Portland, Oregon

W. FROMOW & SONS

Rhododendrons, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES

Surrey, - - - England

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

FRAMINGHAM QUALITY NURSERY STOCK

for
YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and

PRINTED IN ANY MANNER that may be called for

Prices as low as First-Class Work and Unequalled Promptness in

Delivery will justify.

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

THE WAR IS OVER
Nursery Business Will Boom
Are You Prepared?

Plant largely of

ORNAMENTAL TREES, SHRUBS and VINES

Our price list of this stock for lining out in nursery rows is ready now. Write for copy.

THOMAS B. MEEHAN CO.

Wholesale Nurserymen

DRESHER,

PENNA.

Subscribers to "Nurserymen's Fund for Market Development."

Mayflower Peach Trees

For spring shipment we have just a few hundred trees of Mayflower, suitable for retail orders, more than we shall probably need for our regular business. They are offered at trade prices, subject to being unsold on receipt of order. Can supply in different sizes, 4 to 5 ft. Order at once, as they will not be quoted again.

J. Van LINDLEY NURSERY CO.

Pomona, N. C.

Peach Seed, Of Course.

Subscribers to Market Development Fund.



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address

The Florists' Exchange, P. O. Box 100, Times Square Sta.

When writing to Advertisers please mention the National Nurseryman.

SOME GOOD THINGS FOR IMMEDIATE SHIPMENT

CALIFORNIA PRIVET

5,000 6 to 12 in.
10,000 12 to 18 in.
10,000 18 to 24 in.
10,000 2 to 3 ft.
5,000 3 to 4 ft.
2,000 4 to 5 ft.

BOXWOOD (Dwarf)

100 12 in.
100 18 in.

BARBERRY THUNBERGII

5,000 6 to 12 in.
10,000 12 to 18 in.
10,000 18 to 24 in.
10,000 2 to 2½ ft.
5,000 2½ to 3½ ft.

CALIFORNIA PRIVET, (Specimen)

2,000 4 ft. high; 3 ft. broad

BOXWOOD

400 18 in.
400 24 in.
400 30 in.
50 36 in.

PEONIES

Select one-year plants, three to five eyes.

1,000 Duchesse de Nemours (White)
1,000 Edulis Superba (Pink)
2,000 Felix Crousse (Red)
1,000 Festiva Maxima, (White)
1,000 Madame de Verneville (White)
250 Baroness Schroeder .. (White)
500 Unnamed (Red)
250 Unnamed (Pink)

FLOWERING SHRUBS

BUTTERFLY BUSH

200 3 to 4 ft.

CORAL BERRY

750 2 to 3 ft.

DOGWOOD, RED TWIG

100 2 to 3 ft.
100 3 to 4 ft.

DEUTZIA, CRENATA

750 3 to 4 ft.

DEUTZIA, PRIDE OF ROCHESTER

2,000 3 to 4 ft.

ELDER, FERN LEAF

200 3 to 4 ft.
200 4 to 5 ft.

GOLDEN BELL, DARK GREEN

500 3 to 4 ft.

INDIGO, FALSE

50 4 to 5 ft.

MOCK ORANGE, GOLDEN

100 3 to 4 ft.

MOCK ORANGE, GORDONIANUS

250 2 to 3 ft.
250 3 to 4 ft.

MOCK ORANGE, GOLDEN DWARF

100 12 to 18 in.

ROSE OF SHARON, DOUBLE WHITE

50 2 to 3 ft.
50 3 to 4 ft.

ROSE OF SHARON, DOUBLE PINK

100 3 to 4 ft.
100 4 to 5 ft.

ROSE OF SHARON, DOUBLE RED

100 3 to 4 ft.

SIBERIAN PEA SHRUB

100 3 to 4 ft.

SCOTCH BROOM

100 2 to 3 ft.

SWEET SCENTED SHRUB

200 2 ft.

SPIREA, VAN HOUTTII

750 2 to 3 ft.
500 3 to 4 ft.

SPIREA, ANTHONY WATERER

200 12 to 18 in.
300 18 to 24 in.

WEIGELA, ROSEA

200 2 to 3 ft.
100 3 to 4 ft.

WEIGELA, AMABILIS

100 2 to 3 ft.

WEIGELA, AMABILIS ALBA

200 2 to 3 ft.
300 3 to 4 ft.

AMERICAN ARBORVITAE, (Thuya Occidentalis)

100 2½ to 3 ft.
200 3 to 3½ ft.
200 3½ to 4 ft.
500 4 to 4½ ft.
500 4½ to 5 ft.
500 5 to 5½ ft.
200 5½ to 6 ft.
100 6 to 7 ft.
100 7 to 8 ft.

KOSTER'S BLUE SPRUCE (Specimen Plants)

50 1½ to 2 ft.
50 2 to 2½ ft.
50 2½ to 3 ft.
50 3 to 3½ ft.
50 3½ to 4 ft.
50 4 to 4½ ft.
50 4½ to 5 ft.
50 5 to 5½ ft.
50 5½ to 6 ft.
50 6 to 7 ft.
50 7 to 8 ft.
50 8 to 10 ft.

MAPLE, NORWAY

5,000 7 to 8 ft.; 1 in.
10,000 8 to 10 ft., 1¼ to 1½ in.
10,000 10 to 12 ft., 1½ to 1¾ in.
10,000 12 to 14 ft., 1¾ to 2 in.
10,000 14 to 16 ft., 2 to 2½ in.
10,000 2½ to 3 in.
5,000 3 to 3½ in.
2,000 3½ to 4 in.
400 4 in.

HEMLOCK, CANADIAN

100 1 to 1½ ft.
200 1½ to 2 ft.
200 2 to 2½ ft.
500 2½ to 3 ft.
500 3 to 3½ ft.
500 3½ to 4 ft.
200 4 to 4½ ft.
100 4½ to 5 ft.
100 5 to 6 ft.

SPRUCE, NORWAY

500 2½ to 3 ft.
500 3 to 3½ ft.
1,000 3½ to 4 ft.
1,000 4 to 4½ ft.
1,000 4½ to 5 ft.
1,000 5 to 6 ft.
500 6 ft.
300 7 ft.
100 8 ft.
100 10 ft.

HARRISONS' NURSERIES,
Berlin, J. G. Harrison & Sons Maryland

Subscribers to "Nurserymen's Fund for Market Development."

Press of Robinson Publishing Company, Hatboro, Penna.



THE NATIONAL NURSERYMAN



APRIL 1919

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa

Our Specialty

A large assortment of high quality Nursery
Stock for the Wholesale Trade.
Fruit Trees, Small Fruits, Ornamental Trees,
Shrubs, Roses, and Vines.

A FINE LOT OF
Elm, American White, all sizes

Wanted — Hansen Hybrid Plums and Compass

Ask for Trade Lists. Write us about your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Progressive, Superb

and Peerless

...Everbearing...

Strawberry Plants

We can supply you fresh dug every
day. Healthy true-to-name, well root-
ed at attractive prices.

Address

The W. F. Allen Company

Salisbury, Maryland

To the Trade:

Are you watching our
Bulletins?

They are money-makers
for you.

C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

WE'RE MUCH TOO BUSY

to write up anything very special for April.

We are putting in long hours in attending to orders and inquiries promptly. Business is booming all over the country, so far as our information goes. It's the biggest year ever with us, by over 25%. Now is the time to make up for some of the lean years that many nursery businesses have been through.

Our Bulletins of Unsold Stock are issued at two-weeks intervals now, so as to have them as nearly correct and "up to the minute" as a constant flow of orders will permit. If you do not receive them regularly write us for the latest one. They are for the trade only. Use printed stationery or enclose business card.

Jackson & Perkins Company Newark, - New York

We are subscribers to the Nurserymen's Market Development Fund.

The
Preferred
Stock

The
Preferred
Stock

PRICES SMASHED

on following

FIRST CLASS STOCK

AMERICAN ARBOR VITAE (transplanted and sheared specimens) 5-6 and 6-7 ft.

AMERICAN ARBOR VITAE (Smaller sizes—unsheared)

HEMLOCK (Transplanted and sheared specimens) 2-3; 3-4; 4-5; 5-6 ft.

PIN OAKS, 8-10 ft. Cal. 1½-2 in.
10-12 ft. " 2-2½ in.
12-14 ft. " 2½-3 in.

KALMIA LATIFOLIA, Fine Bushy Stock, 1-1½ ft.; 1½-2 ft.

HYDRANGEA P. G. 1½-2; 2-3; 3-4 ft.—Well branched.

FORSYTHIA, HONEYSUCKLE, SYRINGA, SPIREA
WEIGELIA, PERENNIALS, WILLOWS, ETC.

POPLARS for lining out

" LOMBARDY 3-4; 4-5; 5-6 ft.
" CAROLINA 3-4; 4-5 ft.

FRUIT TREES—Apples in ½ and ⅝ in. grades.
Peaches in 9-16 grade.

Pleased to Quote on small quantities or car load lots.

THE BARNES BROS. NURSERY CO.
Yalesville, Conn.
Box E.

J. H. Skinner & Co.

Topeka, - Kansas



Japan Pear Seedlings.

Russian Apricot Seedlings.

Forest Tree Seedlings—Catalpa, Maple,
and Locust.

Fruit Trees—Apple, Cherry, Kieffer Pear,
Peach and Plum.

Rhubarb, Divided Roots, True Myatt's
Linneaus.

Grapes

Shade Trees

Flowering Shrubs

Paeonias

Hill's Evergreens

We are headquarters for Everything in the Evergreen line, and with few exceptions have our usual full supply, but some things are scarce and getting scarcer every day. Owing to lack of imports, demand is brisk, and shrewd Nurserymen are covering their requirements early.

Nurserymen—Send us your list of wants in young Evergreens for lining out. Also Deciduous Trees, Shrubs and Vines. Our Propagation Department is one of the largest and most complete in America, and feel sure we can save you money and give complete satisfaction.

Dealers—Let us take care of your wants in Windbreak, Hedge and Ornamental Evergreens. Send in your list for pricing now, while assortment is complete.



The D. HILL Nursery Co., Inc.
Evergreen Specialists
LARGEST GROWERS IN AMERICA
Box 401 - Dundee, Ill.

When writing to Advertisers please mention the National Nurseryman.

PAINESVILLE NURSERIES



AMERICAN ELMS

THIS IS THE PLACE

To look first,—and save time for

FRUIT TREES

NUT TREES

SMALL FRUITS

ORNAMENTAL STOCK:

DECIDUOUS TREES,

EVERGREEN TREES,

SHRUBS

FIELD GROWN ROSES

Hardy Perennial Plants

Greenhouse Plants and Bulbs

Definite Want Lists promptly quoted.

SEEDS

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

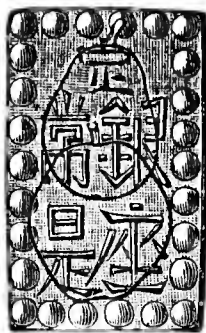
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

73 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

For Spring 1919

Our largest surplus consists of the following:

Montmorency, Richmond & Dye House ¾ in. up

Apple - - - - 3 and 4 years

Ben Davis Dr. Matthews

Benoni Gano

Banana McIntosh

Canada Red Maiden Blush

Carson, (red, earlier than Yell. Trans.) Stark

Ragans Red, (Black Ben Davis) Wagoner

Plums - - - 11-16 and 5-8 in.

Lombard, Bradshaw, Shropshire.

Norway Maple, (20,000) - - up to 2 in.

These maples are straight and fine stock.

American Elm, (25,000) - - up to 2½ in.

Spirea Van Houtti, 3 to 4, 4 to 5, 5 to 6 ft. bushy

Also a general assortment of small fruits,
shade and ornamental trees and plants.

C. M. Hobbs & Sons

Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

ROSE STOCK

Be independent grow your own ROSE STOCKS for budding or grafting. Those using ROSA MULTIFLORA JAPONICA STOCK prefer it to Manetti. We offer for immediate delivery New Crop unhulled Seed.

95 Chambers St.

McHUTCHISON & COMPANY

New York, N. Y.

Write for prices.

Ornamental Nursery Stock

TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS PLANTS

Large assortment. Long list of varieties and sizes

Get our New Trade Catalogue,—ready now.

Fall price list out of date.

Thomas B. Meehan Co.

WHOLESALE NURSEYMEN,

DRESHER

PA.

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Spring 1919

250,000 Cal. Privets in grades 2 and 3 yr.
500,000 Asparagus, 2 and 3 yr., Asst.
Barberry Thun., 18-24 in. and 2-3 ft.
Lombardy Poplars in grades 6 to 16 ft.
Oriental Planes in grades 6 to 12 ft.
Tulip Poplars, 6-8 ft.
Horse Chestnuts in grades 7 to 12 ft.
Catalpa Speco in grades 8 to 12 ft.
Butter Nuts 4 to 8 ft., in grades.

Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft.,
Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft.
and 4-5 ft., Hydrangeas P. G. 18-24 in. Write for Prices.

Under the present conditions we find the mail is often delayed and we ask our patrons to please send advertising matter promptly to our office at Hatboro, Pa.

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

-- Peach Trees --

Good assortment in all grades. Send list of wants. Other Fruit Trees, Shade Trees, Evergreens, Shrubbery and Privet in good supply.

THE RAKESTRAW-PYLE CO.

Willowdale Nurseries

Kennett Square, Pa.

1918 Peach Seed

We offer a surplus of

100 bushels of North Carolina Peach Pits

Crop 1918

At \$3.00 per 50 pounds

F. O. B. here

H. F. Hillenmeyer & Son

LEXINGTON, KY.

IBOLIUM

THE NEW
HYBRID

To be sent out in Fall 1919.
THE ELM CITY NURSERY CO.

HARDY PRIVET

(L. Ibota x Ovalifolium)

More about it later.

Woodmont Nurseries, Inc.

Introducers of BOX-BARBERRY
NEW HAVEN, CONN.

When writing to Advertisers please mention the National Nurseryman.

Can't Find It? Need It Quick?

We are busy, we are willing and able to be busier; handling a lot of orders but have the stock, the men and the system to handle more. All have left here on time so far—and that means more stock shipped this spring to date than during all last season.

All good stock will be cleaned up this spring. That means not only Evergreens but Shades and Shrubs too. Betcher bonds on it. Stick a pin in that guess.

You folks all know us and a lot of you know our stock and service.

Whatcher need? Maybe we have it. Try us, anyway and after you know Princeton Products, you'll get the habit of trying us **first**.

PRINCETON NURSERIES

Princeton, New Jersey,

March 25.



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

==
THE

North-Eastern Forestry Co.

CESHIRE

...Connecticut...

Bulbs Will Be Scarce

altho at present our assortment of Dutch Bulbs is complete, the anticipated demands of this season, together with the crop shortage in Holland makes it certain that you should

Get Your Order In Now

Nurserymen who delay will have to scrape along with inferior lots. You can guarantee your supply by sending us a list of your needs today. Don't neglect it! Our wholesale price is free on request.

F. J. Grootendorst & Sons

2 Stone St., New York City

Home Office, Boskoop, Holland

We are now ready to quote lowest prices on

**FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries

Sparta, Ky.

FOR YOU

A general line of Nursery Stock: Fruit, Shade and Ornamental Trees, Evergreens, Asparagus, Rhubarb, **California Privet, Oriental Planes, Pin Oaks** in carload lots.

Send us your list of wants for prices

Franklin Davis Nurseries, Inc.

JOSEPH DAVIS, General Manager.

404 W. Baltimore Street

Baltimore, Md.

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

PEXTO TOOLS

FOR USE ABOUT THE HOME AND FARM
FOR THE MECHANIC IN EVERY TRADE



Sell MORE Nursery Stock This Book and Plan Will Help You

Take care of your old customers but *keep adding new ones*. It's the only way to show a healthy increase in business and profits each year.

The Little Pruning Book offers the solution. It is an authoritative guide to correct pruning. Illustrates and explains how, when, and where, to prune for bigger and better fruit, flowers and plant life in general. Familiarize more customers with the fundamentals underlying the art of pruning and greater interest and more purchases will result.

The Plan Behind the Book



Our selling plan increases *your* profits by placing *The Little Pruning Book* in the hands of your customers *through you*. Your sales of nursery stock will increase as a matter of course.

Sending for a free volume does not obligate you in any way. It will bring you details of our cooperative plan of distributing this educational work, through nurseries. (The Little Pruning Book sells in book stores at 50 cents).

THE PECK, STOW & WILCOX COMPANY

Mfrs. Mechanics' Hand Tools, Tinsmiths' and Sheet Metal Workers' Tools and Machines, Builders' and General Hardware.

Southington, Conn.

Cleveland, Ohio

Address correspondence to 2189 W. Third St., Cleveland, Ohio

100% American for 100 years. Founded in 1819



When writing to Advertisers please mention the National Nurseryman.

Holland Stock --- Just Arrived

By almost every steamer arriving from Holland ports, we receive consignments of seasonable stock, such as

Norway & Schwedler Maples, 4-5 ft., 5-6 ft., 6-8 ft., 8-10 ft. etc.

Boxwood Pyramids, Standards and Bushes.

Rhododendrons, Hydrangea P.G., Magnolias, Jap. Maples.

Evergreens in many varieties, semi-grown sizes, etc.

All are offered in case and bale lots at F. O. B. New York prices for shipment direct from the docks as the consignments arrive. If you are not receiving our offers advise us what you are interested in.

Bay Trees, Standards, Pyramids, and other shapes will arrive from Belgium this month. Write for offer.

McHUTCHISON & CO., The Import House **95 Chambers St., NEW YORK**

Lasting Beauty



Landscape gardening can secure remarkable effects, both good and bad. A pleasing layout is of primary importance, but any elaborate arrangement of trees is useless, when irregular growth for five years will bring about undesirable results.

GOOD

NORWAY MAPLES

make a steady and regular growth. Our trees are of the highest quality. Transplanting has developed their roots. They caliper 1 to 3½ inches. As shade trees they are unsurpassed. You can sell and recommend them. Delivery by truck within fifty miles of New York.

Swan River Nurseries, Patchogue, New York

Vincennes Nurseries, W. C. REED, Prop. VINCENNES, - - INDIANA

We are pleased to offer for Spring or Fall:

CHERRY, 2 year X X 1 inch up, also ¾, ⅝ and lighter grades.

CHERRY, One year 1¼ up, ⅝ & ½ to ⅝

Our Blocks of Cherry are largest to be found in U. S. We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment.

Grafted Hardy Northern Pecans.

Car Lots a specialty, also fair assortment of Ornamentals.

Subscribers to "Nurserymen's Fund for Market Development."

FAIRFIELD NURSERIES FRUIT AND SEED FARMS

I have sold all the stock I will have this Spring, but this Summer I will be ready to book orders for Fall, 1919 and Spring 1920 delivery.

The war is over and good times are ahead. No more guns or ammunition will be needed, but you will want more of my Grape Vines, Scarlet and Crimson clover and Cow-Peas than ever before.

Keep me in mind.

CHAS. M. PETERS

P. O. Address Salisbury, Wicomico County, Maryland.

Long Distance 'Phone and telegraph, Salisbury, Maryland.

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSEYSTOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVII.

HATBORO, PENNA. APRIL, 1919

No. 4

Pagoda Tree of Japan



Sophora Japonica

To the flora of Japan we are indebted for many good things and not the least of these is the Pagoda tree, *Sophora Japonica*. As a flowering tree it may not be as showy as the magnolias yet it possesses merit in another

direction and equally as noteworthy, i. e., blooming in midsummer when trees in flower are scarce. In fact, it stands alone in this respect for its nearest competitor, the varnish tree (*Koelreuteria paniculata*)—has spent itself in early July.

At a distance the dark green outline of the *Sophora* would suggest a willow but upon close inspection the leaves are found to be compound and resemble the yellow locust (*Robinia*). The foliage remains green until late in autumn and the large panicles of cream white flowers are borne in August—plenteously as our photograph will attest. Incidentally, the tree illustrated might well have been a candidate in the recent competition of the Genetic Society to locate the largest tree of a species, for the trunk is three feet in diameter, and the spread of branches



Flowering Branch of Sophora Japonica

seventy feet across. It is the largest in the vicinity of Philadelphia, where several fine specimens are to be found. This particular tree may have been planted by Robert Buist, the well known horticulturist, who died in 1880 and whose place is not far from that of John Bartram, the botanist to whom we are indebted for the discovery of the rare Franklin tree—*Gordonia pubescens*. The writer “found” this *Sophora* recently on the old Buist estate where it narrowly escaped being cut down to make room for the housing of Uncle Sam’s ship builders at Hog Island on the Delaware River. Uncle Samuel’s representatives, however, were appreciative of the value of trees to a community and so the layout was adjusted and a certain area set aside for the worthy twofold purpose of providing a small park and the preservation thereon of the existing fine old trees.

On seeing a large *Sophora* flourishing so well as a lawn tree the thought occurs of its adaptability for sidewalk planting. That they would be handsome and provide a treatment out of the ordinary there is no doubt. The main objection to this, however, is the habit of low branches or the formation of a “basket” head. Young trees in the nursery invariably show this characteristic and as they are not rapid growers do not take kindly to trimming up to make street trees. A better way of bringing about higher branched trees might be to allow them to remain crowded longer in the seed beds or if transplanted to plant them close to induce an upright rather than a spreading growth. Plants may be easily grown from seed which catalogs quote at 75c to \$1.00 per pound.

SAMUEL NEWMAN BAXTER,
Aboriculturist for the City of Philadelphia, Pa.

FROM THE U. S. DEPARTMENT OF AGRICULTURE

CAN THE UNITED STATES GROW ITS OWN FRUIT STOCKS?

The soils of France and America, as well as the souls of those two countries, have been blended—literally.

The most notable instance of the incorporation of American soil into the soil of France was the taking to France of several barrels of American earth in which to bury the body of Lafayette, but French soil has been incorporated into American soil in literally millions of places. Probably every county in the United States has its admixture of French dirt, and it is scarcely too much to say that some particles of it have found their way to practically every farm throughout the length and breadth of the country.

How did it come? On fruit stocks. The above-ground portion of your fruit trees may be pure American, but the underground portion is very likely to be foreign. With the exception of the apple and peach, most of the seedling plants on which grafting or budding is done are imported, and even with the apple considerable progress has been made in producing American-grown seedlings. From imported French seed many nurserymen have thus far preferred to import apple seedlings from France and to pay more for them. Just now, however, rather determined attention is turned toward a solution of the problem of fruit-stock production in this country. All of the peach stocks are now “home” grown from seeds produced in this country.

“We are beginning to appreciate more and more,” says one of the plant pathologists of the United States Department of Agriculture, “that our future successful fruit culture is intimately associated with the problem of stocks. With the exception of the grape, no far reaching studies have been made on stocks in this or any other country. We have followed certain empirical practices in the past, but as competition becomes greater and the demand for the highest grades of fruit and plant products increases, we must know more of the actual relation of stocks to quality of product, to the length of life of the tree or plant, to adaptability to soil and climate, to resistance to disease and insect attacks.”

One of the questions to be solved, according to the De-

partment of Agriculture, is the practicability of producing in this country the millions of ordinary apple, pear, plum, and cherry stocks which hitherto have been secured largely abroad. Another need is the systematic study of stocks with a view to their improvement and better adaptability to the wide variety of conditions and needs that exist here and that are likely to develop as the fruit industry becomes more complex. If fruit industries are to be maintained, the department thinks it is imperative that there be available full supplies of the ordinary stocks, and it is desirable to find or develop stocks that may prevent some of the losses from insects and diseases.

"If stocks are to be produced in this country to take the place of those hitherto secured abroad," the state-

ment continues, "it would seem proper that efforts should be made by the Government to aid those who are anxious to know where the work can best be done and how it may be done to the best advantage. The problems involved are so complex that private interests can not well handle them. The chief problems are to find regions and soils in this country where stocks may be commercially grown and to demonstrate on a commercial scale that such stocks are equal to or better than those grown abroad. Correlated with the problem of commercial stock production is that of securing seeds for stocks. There is need for developing our home supplies. This is a long time proposition, as there are few recognized sources of supply here, such as exist in Europe."

Nurserymen's Market Development Campaign Under Way

Funds Coming in well and Substantial Start Made

Manager Rockwell points out great necessity of better organization among nurserymen as foundation for future Market Development work on large scale.

The work of Market Development which has been discussed for several years by many nurserymen, and a subscription fund to start which was effected at the convention in Chicago last June is now definitely organized and making progress.

The outline of work which the Executive Committee appointed by the Board of Directors of the organization for Market Development covers the following lines:

First to create MORE BUSINESS, *Publicity*, including articles which are being supplied to some 500 newspapers from Maine to Florida and as far west as Minnesota and the Dakotas.

NURSERYMEN'S NATIONAL SERVICE BUREAU

ARTICLES FOR SELECTED NEWSPAPERS

- | | |
|-------|--|
| March | Small Fruits and Berries for the Home Place
Perennials for Spring Planting
Shrubs for Continuous Bloom
Roses Without a Formal Rose Garden |
| April | Early Spring Work in the Home Fruit Orchard
How to Set Out Plants so They Will Live
Early Work With Your Hardy Perennials
Trees for More Comfort |
| May | Paving the Way for Perfect Fruit
More and Better Roses
Color Effects with Shrubs
Protect your Plants from Insects
Protect your Plants from Disease |
| June | Making the Garden Safe Against Dry Weather
Starting the New Hedge Right
Start Now to Grow Blooms that will Take Prizes this Fall
Summer Pruning. |

That the newspapers are glad to have material of this kind may be gathered from some of the following comments which have been received:

From the Philadelphia Record—

"Immediately upon receipt of your letter of March 6 we telegraphed you as follows: Glad to accept your offer of March 6. We know Mr. Rockwell as an authority and fine writer.

"We wish to thank you for having submitted this service to the Philadelphia Record."

From a Telegram from the Daily Argus Leader, Sioux Falls:

"Please put us on for Rockwell Articles Exclusive here."

From The Times-Union, Albany, N. Y.

"We will make use of the series of articles by Mr. Rockwell as outlined in your letter of March 6th. Direct them to me personally, care of this office, and I will try and make the best use of them that our space will allow."

From The Springfield Union, Springfield, Mass.

"I enclose properly filled out the card that you sent The Union. Yes, we should like to receive your service, and we will run it in our Sunday edition, giving it a proper display. I am quite sure it will be valued by our readers."

From The Sunday Courier, Poughkeepsie, N. Y.

"We are in receipt of your newspaper article entitled 'Perennials for Spring Planting.' This sort of article is very excellent and we will be very glad to use it."

From The Ottawa County Republican, Port Clinton, O.:

"We have used two of your articles on Fruits, flowers and shrubs and will use the others if you will send them along. They are good, just what we want."

From the Pioneer, Bemidji, Minn.:

"We will be much pleased to make use of your series of articles by Mr. Rockwell, as outlined in your letter."

From The Recorder, Catskill, N. Y.:

"Your proposition at hand and noted, and, having used

articles by Mr. Rockwell last year, we would like to take on these."

Two lectures, illustrated with lantern slides, one on "Your Home More Beautiful" and the other on "How to Plant," to be supplied to Garden Clubs, schools, churches and similar organizations have been advertised in the Garden Magazines and will be ready for distribution in the near future.

Service for Horticultural magazines in the way of supplying photographs, getting material for special articles, suggesting writers, etc., to help along the general interest in the planting of ornamental and fruit trees has been started. In the course of time with the co-operation of nurserymen who are subscribers to the Market Development campaign, this feature can be built up into a means of doing a great deal of educational work along the lines in which we are interested at very little expense.

As was explained in a former statement of the work being started by the National Service Bureau, no general advertising campaign to the buying public is contemplated this spring, as the Executive Committee has felt that this particular phase of our work should not be undertaken until a much larger fund is available for advertising, and until the many problems of organization—such as getting in new members, arranging a basis of payments that will be just to all, the employment of an association trade mark, etc.—have been more fully worked out. Some excellent opportunities for publicity on a national scale at very slight cost in proportion to the results to be achieved are available when we are ready to take advantage of them.

In line with furthering the work for Market Development the Nurserymen's National Service Bureau is running a full page advertisement in the trade papers and has prepared for distribution to subscribers to the Market Development Fund, who are urged to use in their mail during the next three months. There are a great many nurserymen who do not yet fully realize the importance of what the Market Development movement may be made to the whole industry. Those already interested should do all in their power to help show these who are not yet convinced that it is good business as well as a certain moral obligation for them to do their share in this big movement which is bound to help the entire industry and every one in it.

Firms from whom actual cash contributions have been received so far include the following:

Oaklawn Nurseries,
Chase Nursery,
C. R. Burr & Co.,
W. W. Hunt & Co.,
Fraser Nursery Co.,
W. C. Reed,
Mount Arbor Nurseries,
Shenandoah Nurseries,
J. W. Hill,
Des Moines Nursery Co.,
G. W. Prescott,
Willadean Nurseries,
J. G. Harrison & Sons,
Charles M. Peters,
H. J. Weber & Sons Nurs. Co.,
New Haven Nurseries,
Stark Bros.,
American Forestry,
Adams Nurs. Co., (John W.),
W. E. Breed,

St. Cloud Nursery Co.,
O. A. D. Baldwin,
Maloney Bros. & Wells,
Jackson & Perkins Co.,
H. H. Charles Advertising Co.,
Peter Youngers,
Harrison Nursery Co.,
Marshall Bros. Co.,
Sondregger Nurseries,
J. N. Skinner Co.,
Benjamin Chase Company,
J. Van Lindley Nursery Co.,
Plainfield Nurseries,
F. & F. Nurseries,
Princeton Nurseries,
Peter Bohlander & Son,
Charles Ernst,
Storrs & Harrison Co.,
Jim Parker,
William H. Moon Co.,

Thomas B. Meehan Co.,
Conard & Jones Company,
J. F. Jones,
J. W. Root,
Hoopes Bro. & Thomas Co.,
Southern Nursery Co.,
Cumberland Nursery Co.,
W. T. Hood & Co.,
Holsinger Bros.,
Earl Ferris,
American Fruits Pub. Co.,
N. E. Forestry Co.,
Augustine & Co.,
Bryants Nursery,
Nelson Swain & Son,
Mentor Av. Nursery,
Chanute Nurseries,
Pennsylvania Nursery Co.,
Harvard, Ill.
C. M. Hobbs & Son,
Littlefield & Wyman,
J. W. Thomas & Son,
Hillenmeyer & Son,
Clinton Falls Nursery Co.,
Sherman Nursery Co.,
Jewell Nursery Co.,

J. H. McFarland Co.,
Swan River Nursery,
Baker Bros.,
C. B. Wright,
F. F. Bernardine,
H. P. Kelsey,
U. S. Nursery Co.,
Knox Nursery,
Bunting Nursery,
A. M. Wolherst,
W. & T. Smith,
S. G. Harris,
J. B. Pilkington,
Westover Nursery Co.,
P. W. Watson & Co.,
J. F. Jones,
D. Hill Nursery Co.,
Waxahachie Nursery Co.,
Chas. Mumm,
Northwest Nursery Co.,
Oscar W. Will & Co.,
Thomas A. McBeth,
A. W. Pierson, Inc.,
Rakestraw-Pyle Co.,
J. O. Kelly & Son,
Graham Nursery Co.,
F. C. Thurlow & Sons.

Only 25 per cent. of the first year's contribution was asked for on the first call, and the second 25 per cent. will be called for in a few days. Subscribers who have not yet made their first remittance are urged to do so immediately.

It has been realized from the beginning that the work of the National Service Bureau must include service to nurserymen as well as to the users of nursery product.

Certainly it is a direct service to nurserymen to have the educational articles and the lectures which the Bureau has prepared used as widely as possible throughout the territory through which they sell. If there is not a newspaper in your vicinity already running the series of articles mentioned above, see to it that you write at once and let us know what newspaper in your section would be the best in which to have these articles appear. Give us the name of the editor and we will get in touch with him by return mail. Also see to it that your agents make known to any garden clubs, village improvement associations, or members of similar societies with whom they come in contact, that the illustrated lectures of the National Service Bureau may be obtained without any expense except to cover transportation charges.

Another thing which the Service Bureau has done which is of direct benefit to nurserymen has been taking up with a number of leading publications, the matter of nursery firms advertising to the retail consumer that they would sell at wholesale prices. This kind of "competition" is not a good thing for the nursery industry. We are glad to report that in a number of cases we have been successful in having this kind of advertising eliminated. In the majority of instances the firms agreeing to discontinue this form of advertising have stated that they were glad to get away from it but had felt that they had to do it to meet the competition of the "other fellow."

But without any doubt the greatest service which can be rendered nurserymen is the establishment of some degree of standardization as to products and service and some form of organization which will eliminate the present system of competition largely on the basis of price

alone. Everywhere the manager of the Nurserymen's National Service Bureau has been, and from the dozens of nurserymen with whom he has discussed the general subject of Market Development, has come the same story:

"Yes, we do need a campaign for market development and more business, but even more than more business we need better business!"

Well, if that is true,—and all the evidence available seems to indicate that it is true,—there is no one on earth who can make better business but the nurserymen themselves. It is no wonder that some nurserymen have hesitated about putting up money for market development work when they felt that in order to get as much business as they should have even under present conditions, they had to meet or come very near meeting the competition of some firm or individual who was willing to sell stock at less than what it actually cost to grow it,—in some instances at less than it cost to dig, pack and ship it! And it is no wonder that others have hesitated to join an organization contemplating a campaign for increasing the demand for nursery products when they felt that other members of the same association might ship out stock which was either poorly grown or not true to name, and as a result would "kill" the demand for nursery products and cause the buying public to be generally suspicious of all nurserymen.

If such conditions are serious obstacles in the way of market development on a national basis—and there can be no doubt that they are,—then most certainly it is part of the work of the organization built for the purpose of market development to see if it is not possible to do something toward bettering practices which have and are still having such a serious effect on the entire industry. With this in mind the Executive Committee of the Organization for Market Development is endeavoring to work out a practical plan which will be directly aimed at the elimination of these conditions and thus help to build a broader and a firmer foundation for the market development work which it is hoped to accomplish during the next five years.

Every association of nurserymen in the country has felt increasingly the necessity for attempting to do something along this line; something to curb the actions of the grower who is attempting to quote prices without any regard to cost or who is willing to sell stock which is not up to the quality that should be maintained in order to quote "cheap prices." Many attempts have been made, and while they have not succeeded in accomplishing everything which needed to be done, nevertheless PROGRESS HAS BEEN MADE. It should be kept in mind that it is not so much where we are as the direction in which we are going that really counts! By far the greater number of nurserymen with

whom the manager of the National Service Bureau has talked have felt very definitely that some things have been done and that the time for doing still more important things, looking to the improvement of conditions in the industry, is ripe. If this is true then most certainly it is up to every nurseryman who thinks at all well of the business in which he is engaged or if he expects to remain in it for any time to come to put his shoulder to the wheel along with the rest of the bunch and do his "bit".

The Executive Committee is anxious and eager to have the co-operation of anyone who has helped to do the good work already done. Several of the associations in attempting to bring about some degree of standardization and a minimum level of prices fixed at least above actual cost of production, and will be glad to receive any suggestions along this line.

The Manager of the Nurserymen's National Service Bureau which has its headquarters at 220 West 42nd Street, New York, will be glad to send full particulars regarding the syndicated articles sent out, illustrated lectures, etc., to any nurserymen whether a subscriber to the market development fund or not. The National Service Bureau is to help all nurserymen—but by that same token all nurserymen should help the National Service Bureau. If you are not a subscriber yet, let us hear from you so we can explain a little more fully just what you will have to gain by coming aboard.

THE FARM TRACTOR

The Purdue University, Lafayette, Ind., has issued a circular on the Farm Tractor, giving an analysis of tractor situation in that state.

The results are very interesting and viewed from all angles indicates a decided gain in popularity and there is little doubt but that their use will steadily increase.

Out of 95 owners reporting 77 expressed themselves as satisfied.

Maximum results can only be expected when the operator of the tractor is a thorough mechanic, and it looks as if the farmer or nurseryman of the future will have to be a good machinist if he expects to be successful in his profession.

"The question 'How long will a tractor last?' is frequently asked, and it cannot yet be answered from the experience of Indiana farmers, as most of the tractors are less than three years old. There are well cared for stationary gas engines which have been running day after day for 20 years and are still giving good service. If a tractor is carefully watched and the 'stitch in time' is always given, it would seem as if it should be good

for at least eight years' service. One tractor owner who purchased an experimental machine in 1911, of what is now a leading tractor company, stated that it is working as well as ever this year and apparently would still give much more service. The old saying 'pound makes pound' is probably fundamental to the life of a tractor. If the bearings are permitted to become loose the engine will soon hammer itself to destruction, hence the necessity of careful and frequent inspection.

"A young farmer called into military service wrote as follows: 'I wish to say that my tractor has for three years given very satisfactory service. I made it a rule to give it at least as much time every evening as it would take to put away a team. I tightened any loose bolts and made sure it was in good shape for the next morning,

and I can say that very little time was lost from failure of the tractor to run.'

"Service by the tractor companies is important to the purchaser who is not familiar with tractors. Here is a most reasonable proposition made by one tractor selling agency. 'We will help you through the first season free of cost, at the end of the season our man will dismantle the tractor and engine and instruct the owner how to adjust the bearings, grind the valves, and generally keep his tractor in repair; after that all service will be charged for.' This proposition is fair, as it gives the owner ample opportunity to learn about his tractor and the limit set makes him keen to learn. At the same time, it protects the selling agency from the imposition of never ending requests for service."

Beautification of the Home Surroundings

By Virginia Hale, Nashville, Tennessee.

THE first word which I have to say in the consideration of beautifying home surroundings is to urge the advantage of the expert advice of a thoroughly trained, well educated landscape architect.

I am often reminded of a letter which I saw some years ago in the query box of a local paper. "Dear Mr. Editor," it read. "I am in much trouble. I am building myself a house for which I drew the plans and now that it is almost completed I find that the main stairway starts in the kitchen and lands in the bathroom. What would you advise me to do?"

Just so, many of the home grounds laid out by amateurs show an absolute lack of design,—the road or path approaches the house from the worst possible point of vantage,—a screening of the service portion becomes an impossibility,—the service drive proves inadequate for the maneuvering of heavy coal and ice trucks,—the garden portion is probably cut in two by the drive and the living portion of the lawn exposed to the view of every incomer as well as every passerby. Only the person who has made such mistakes and has attempted to rectify them knows just how costly they are both as to time and money. Mistakes which the rich men can better afford, than the man of limited means.

America having lived through her architectural reign of terror or as one famous architect calls it "the pug-poodly-hound-New Foundland style" is building for herself many beautiful homes. If as a people we have learned to appreciate and demand good architecture, should we not have the wisdom to seek as great knowledge as possible in the disposition and location of the house and the treatment of the most important piece of ground in the world to each individual,—the area, large or small, around one's home?

The landscape architect must be a man trained in design as well as in horticulture, he must be theoretical as well as practical, he must be a man of broad far-seeing vision as well as with an eye for the minor detail, for of all artists he is the only one who never sees his work

completed, he can only visualize with his inner eye how his silent partner, nature, will execute his plans and designs long after he has passed on.

It is a great profession which is just now coming into its own, and it seems to me that it is to you nurserymen that we should look for the coming generation of landscape architects. From you, your children should inherit a horticultural taste and knowledge which added to the technical and artistic training which you may give them should produce a well rounded development which should make for landscape architects of distinction, who will be able to cope with the increasing demand for their services in the South.

Without a doubt the landscape architect's hour is at hand. People are turning from the cities to the country for their real enjoyment. Suburban additions are constantly being opened, golf and Country Clubs are built and the fifty foot city lots are being abandoned for the larger spaces of a country acre or acres. This part of wisdom both esthetic and financial demands that we call to our aid the most proficient help to be had,—be that help in Boston, New York or Chicago but let us see to it that in the near future we raise up among us one or more men of such ability and training that we need not send away for advice and then in time we shall have the additional advantage of one possessing knowledge of local climate and conditions.

Harvard, Cornell, Amherst and the University of Illinois all have four courses and are turning out each year graduates well trained to meet the demands of landscape architecture.

Generally speaking all suburban and country places have an entrance side, a service side, a garden side and a lawn side. Naturally the entrance side should be planted with more formality than any other portion of the grounds unless one is going in for a strictly formal garden. The service portion should be permanently and adequately screened. The comings and goings of the groceryman, the iceman and the coal cart, while an es-

stantial part of the daily routine of home life, do not add to the attraction of the place.

The lawn of a home is coming to be considered the out door living room. Fortunately America has lived through most of her publicity period and has awakened to the joy and health and comfort of out door privacy. Here with proper screening the children can romp, the man of the family can plant his garden furniture, the mistress can sew, tea can be served all with the same freedom from the public gaze, as when one draws the curtain of the in-door room.

The garden of the place must be determined by the architecture of the house and the tastes and desires of the owners. With the house as the pivotal point of our planting it should be our aim to make it become through judicious treatment the chief incident in the picture rather than an exeresence foisted upon nature.

It is for this reason that our boundary planting must include native trees and shrubs. There must be a natural link binding us to the surroundings. In other words we must play fair with nature with whom we have upon our own initiative formed a partnership. She long ago set the stage and while an architect of genius will attempt to fit his house to the scene, ninety-nine times out of a hundred, it produces a raw, crude bald blot and it is the province of the landscape architect to soften, subdue and tie the house and its surroundings together. And when one sees sometimes the lovely results accomplished, it might be nature rather than an old French king who originated the saying—"I and Time against any man."

With an intermingling of native growth in our boundary planting one may use more freedom in the approach to the house, selecting shrubs and trees best suited to the style of architecture employed.

To soften the startling crudity of the house itself one must employ vines. Much ugliness is transformed into beauty through their graceful prodigality. The old theory that they make a house damp is false for as a matter of fact they absorb the moisture from the walls.

For a tenacious clinger we must resort to the *Ampelopsis Veitchii*. At the Arnold Arboretum last summer I saw the *Ampelopsis aconitifolia*, quite the most beautiful form of the *Ampelopsis* which I have ever seen, but I have not found it in any of the catalogues. For a loose riotous growth nothing equals the *Wistaria*.

When we come to a consideration of the foundation planting there is much latitude.

If there is need for a green effect the year round we must resort to low growing conifers in this climate as the broad leaved evergreens are not dependable, and cannot be planted with any assurance of a permanent effect. But there should be a liberal comingling of deciduous shrubs with the conifers or the result will be heavy. I know of nothing more charming in conjunction with low growing conifers than *Spiraea Thunbergii*. It possesses all the requisites to lighten, soften and fill in the spaces. It is never advisable I think to plant intense off colors near the house. I spent one violent summer surrounded by *Spiraea Anthony Waterer* and the memory is still painful. I need not speak of *Spiraea Van Houttei*. We all know it and love it for its beauty and its gracious generosity in fitting itself to all conditions and surroundings. But one must confess that when cottage and man-

sion puts a planting of this free flowering shrub around its foundation and sits back in snug satisfaction we are minded of a day out in her nice feather boa.

I think we have never planted enough of the conifers of larger growth in our boundary planting or in our screening but as a class they are most useful and beautiful. As screens, windbreaks and shields they are invaluable as well as holding the general design and outline of the planting.

The most graceful evergreen that grows is right at our door almost, the Hemlock spruce, yet it is not nearly so widely exploited in the nurseryman's catalogue as is the Norway Spruce, a vigorous fine tree in its youth but a poor creature after attaining maturity when it gives itself up to despair, pessimism and sagging muscles, adding lugubriousness and melancholy to any scene. What could be in greater contrast than the White Pine in all its majesty of age with its soaring head stretching skyward and far flung arms dropping benedictions of peace and beauty on all who come within its range. I have read that the White Pine is classed the valuable tree, commercially and artistically of America.

If we do plant these large growing conifers let us not fail to plant with them some of the flowering tree-crabs, double flowering peach and Japanese cherries and we will have as heavenly a vision as we need hope for in the next world. Neither must we forget the combination in which nature so delights,—evergreens and birches,—nothing could be rarer or lovelier.

I also wish to make a plea for more planting of the *Crataegus* or Hawthorne family. They are all lovely, of the most picturesque habit of growth, of the shiniest glossiest of leaves, flowering in spring and carrying gorgeous berries well into winter and even when absolutely bare possessing unusual beauty in their intricacy and multiplicity of branches while if one has never seen them covered with snow and ice they have not seen one of the most exquisite pictures I know in all nature.

May I register a protest against freaks? Variegated foliage should be dealt with very carefully. One of our most distinguished landscape architects has confessed that he has never been able to use *Prunus Pissardi*, the purple plum—that it did not stick out like a sore toe. Nothing more wonderful than the copper beech grows but it needs to be placed by an artist. *Sambucus Canadensis aurea* is a glory in itself but it shouts its existence from the farthest and most hidden spot.

The *Catalpa Bungei* is such a grotesque little tree, I should like to persuade everyone who thinks they want to plant them to use Harthorn instead. I am sure that the coming generations would feel some of the reverent gratitude for us that we do for our forefathers who filled New England with the glory of the Elm.

Among our boys who have made the supreme sacrifice in the war just ended was one who was a poet. He left to us a little poem which will become classic and which if you do not know I will pass on to you.

"I think that I shall never see
A poem lovely as a tree.

A tree whose hungry mouth is prest
Against the earth's sweet flowing breast;

A tree that looks to God all day,
And lifts her leafy arms to pray;

A tree that may in summer wear
A nest of robins in her hair;

Upon whose bosom snow has lain;
Who intimately lives with rain.

Poems are made by fools like me,
But only God can make a tree."

Joyce Kilmer.

And when I plant out the little switches with an inner vision of the tree that is to be I do assure you that I feel like a very favored hand maiden of God to be able to do my small part towards beautifying the world.

EVERGREENS

THEIR PLANTING AND USE

*Read at the Illinois Nurserymen's Convention by
Thomas A. McBeth*

MY principal apology for appearing before you on this occasion is that a wise man once said "any one who plants a tree, or causes two blades of grass to grow where one grew before is a public benefactor." If I can, in my humble way, influence any one to take a more lively interest in, or create a desire for the planting of more trees, I will feel that I have not labored entirely in vain.

To any one traveling over the country and observing the enormous number of trees being cut down, without any attempt or practically no attempt at reforestation, considering the enormous amount of water thrown into the atmosphere by transpiration from growing trees, and their equalizing influence on the temperature and climate, the need is imperative.

I shall not attempt to go into the subject in a scientific or technical way, as that is beyond my ability, but try to give what information I have been able to collect from the observations of others and my own experience during several years of practice. (I am fully aware that I will not be above criticism). I feel highly honored that I was called upon to be the first man to speak on Evergreens to the nurserymen of the state in which Coniferous Evergreens were first grown in the United States for a commercial purpose. I refer to the late Robert Douglas, of Waukegan, the godfather of two of our best arbor-vitae.

Since coming here I have heard that the last of the Douglas nursery has passed out of the hands of the family. It seems to me it would be a nice thing if the nurserymen of the United States would buy a part of that property containing some of the fine specimens and set it aside as a memorial to Mr. Douglas. And it seems to me to be eminently fitting that the Illinois nurserymen should take the initiative.

I don't know just what your secretary's idea was in assigning the subject, but I shall divide it into two parts: First, Evergreens; second, their planting and use from the nurseryman's and landscape architect's standpoint. In speaking of evergreens, nurserymen of the north gen-

erally mean Coniferous Evergreens, so I will confine my remarks principally to that class, but may have something to say along the line of broad-leaf evergreens.

My observations apply to the latitude of about 40 degrees. I am situated near that line. It passes through Illinois near Urbane, about half-way down the state. We have very much the same temperature as middle Illinois, except that we are subject to greater extremes. We are on the water-shed between Lake Erie and the Ohio river, the thermometer ranges higher with us than at Cincinnati, and lower than at the Lake. Plants can be grown along the lakes that winterkill in Springfield, Ohio, notably Japan maple, and some varieties of *Retinispora*, *Cupressus*, etc., so that any plants that will endure our climate can be depended on for central Illinois.

Few persons recognize the possibilities of landscape beauty that can be obtained by exercising a careful choice of the species and varieties of evergreens, and providing proper conditions and protection for their growth. I have seen fine effects in landscape work produced entirely with evergreens, but I prefer an intelligent combination of evergreen and deciduous trees and shrubs.

I will mention a few of what I consider the best of the species and varieties that are adapted to our locality. I suspect that the first should be the pines, and to my mind, the first of them is the white pine. It is in its most beautiful period at about twenty to forty feet high, and it carries its foliage well to the ground at that height. The light glaucous green color contrasts beautifully with other species. The long, slender leaves are easily moved by the least wind, and then present a beautiful commingling of green and silver surpassed by few trees. The stately dignity of an old white pine, sixty to eighty feet high, silhouetted against a summer sunset sky, forms a picture well worth anyone's contemplation. It is a good grower, and will thrive any place except in a wet situation. Of recent years it is a victim of the White Pine Blister Rust, which apparently threatens its extermination. (This is one of the imported fungus diseases which our importer friends seem to think of trifling moment).

Then there are the Austrian, Scotch and Mugho pines, the last a beautiful dwarf variety that should be in every collection. Probably the most popular evergreen is the Norway spruce, with which you are all familiar. Its extreme hardiness and adaptability to almost every soil, and the cheapness with which it can be produced, make it an invaluable tree. There is, however, a monotonous formality in its appearance that gives it a questionable value in landscape planting. It is subject to the attack of the red spider, and should not be planted in mass when that is prevalent. Engelmann's spruce is of fine form and a beautiful tree where it does well.

White Spruce (*Picea Canadensis*), is an excellent tree of fine form and lively color. It grows on almost any kind of soil, and, like the Norway, is subject to red spider, and should not be planted much further south than this locality. The Black Hills variety is better suited to the West.

Colorado Blue Spruce is the spruce par excellence. It is perfectly hardy, of sturdy upright growth, and seems to be adapted to all soils. The beautiful silvery blue of some of the varieties makes it a striking figure in any

landscape, and it is equally so on the city lot or as a single specimen. The forms vary considerably. In some, the branches rise in tiers, one above another, and grow horizontally, giving it a stiff formal look so frequently seen in the Kosteri. I prefer the more compact form, as it has a more graceful appearance.

The finest specimen I have ever seen was in Boulder, Colorado. (A man told me there was a finer one in Longmont but it would have to "go some"). I was walking along the street and was attracted by its appearance and went in to ask the lady what she did to produce such a fine specimen. She said she followed nature—every day through the heat of summer in the afternoon she took the hose and sprinkled it and then left the water run around the roots until the ground was thoroughly saturated. That is the case naturally. They grow in the canyons on this side of the range, in Colorado and Wyoming. Every day in the summer from about 2 to 4 o'clock in the afternoon there is more or less rain, and they generally grow in a moist situation. This tree was about 15 to 20 feet high and almost a perfect cone from the ground up, of a beautiful silvery blue. She collected it herself and had grown it from a small tree. This is one of the trees that should not be crowded, is subject to red spider and is frequently injured by it. *Abies Maxwellii* is a low tufted form useful in its place. I have no use for the weeping forms and other monstrosities.

My favorites of all the evergreens for our locality are the *Retinisporas*, particularly the *Pisifera* class, which includes *Retinispora pisifera*, *pisifera aurea*, *plumosa aurea*, *filifera*, *filifera aurea*, and *squarosa* and some others. They are good growers, nice bright graceful foliage, hold their color better as a rule than most evergreens and stand almost any amount of pruning. Almost every one admits their beauty but it has been a common opinion that they are not entirely hardy which I think is a mistaken notion. There is a tree of *plumosa* in our cemetery that is about 30 feet high, has been planted 30 or 40 years, went through last winter without injury. I know of a tree about 20 miles from our place of the *squarosa* variety (one of the most difficult varieties to grow), that is about 10 feet high and has been growing there for at least 15 years without any particular attention. I have all those varieties growing at my place, most of them are now about 6 feet high, and they came through last winter without suffering, indeed not so much as the *Virginiana* type of *Junipers*.

The *Retinispora filifera aurea* I consider the best of the small yellow evergreens, beautiful bright lemon color, perfectly hardy and holds its color throughout the year.

The *Obtusa* varieties don't seem to be so hardy with me. I had about ten trees of the *Gracilis* variety about 6 feet high, four of them were killed outright last winter and the rest are dead about half way down. *Obtusa* did not suffer materially but *Retinispora obtusa nana* suffered badly.

Then we have the *Junipers*, a large and important family, covering a wide range of territory, including some of our most important trees and shrubs, from large trees to low trailing shrubs running through the various shades of color from the yellow *Juniperus canadensis aurea* and *Japonica aurea* through the different shades of green to the dark green of the *Irish* and *Virginiana*, including

such varieties as *Pfitzeriana* (some say if there was but one evergreen, let it be *Juniperus Pfitzeriana*). *J. Virginiana glauca*, *eteganissima Lee*, *sinensis stricta*, *sabina*, *Tameriscifolia*, and a host of dwarf and trailing varieties, all important to the landscape man.

The White Cedar (*C. Thuyoides*), I consider a good tree; it came through last winter in good shape, and is a good grower. *C. Nootkatensis* is of a fine glaucous shade and compact grower, and is fine for a hedge or as a specimen.

The Lawson Cypress is one of the most beautiful evergreens. It is not quite hardy in our locality, but I think it would be all right in the southern part of Illinois. There was one growing about fifteen miles from my place which had grown from a small tree to about twelve feet in height. This was a perfect specimen, with the exception of a little blight on one side. It was offered to me if I would remove it, but I did not think it worth the trouble. I believe it was cut down, so I had no opportunity to see how it stood last winter. I have two of the *Triumph de Boseop* variety that are about six feet high. They both froze down to the snow line last winter.

The Hemlocks are another very ornamental and indispensable family of trees. I gave out of adjectives, but there is probably no more beautiful conifer than the Hemlock. It has none of the stiffness of some. The pendulous branches, with their light and feathery foliage, give it a very graceful appearance. It is of a lively green, and holds its color well. We have two species which are adapted to our climate: *Tsuga Canadensis* and *Carolina*.

The latter, I think is hardy this far north, and the more graceful of the two.

The *Thujas* are another indispensable species. They are generally better adapted for massing, but we have some varieties that make very handsome specimens. *Lutea* is probably the best yellow of the larger conifers. It is a good lively yellow, and holds its color all the year. The *Douglas Golden* is a better grower, but it is not quite as yellow, and inclines more to green in winter. The *Douglas Pyramidal* is a fine conical form. The *Pyramidalis*, probably the most popular *Arbor-Vitae*, is more fastigate than pyramidal (I think it should be called *Fastigata*), is tall and columnar, grows very compactly, and is of a lighter green in winter than most varieties. They make fine single specimens, also groups and tub plants, and also fine for hedges.

The *Thujas* consist of a large variety, running from the tall, formal occidentalis to the low globular forms, from a foot to eighteen inches high and wide. The objection to most varieties, is their tendency to assume a brown color during the winter. This is more than compensated for by the lively green they put on the first few warm days of spring. They are almost immune to fungus and insect diseases.

The *Biotas* (Chinese *Arbor-Vitae*) are another family that have generally been considered too tender for our climate, and I would hesitate to recommend them for a climate this far north. The *Biota Sinensis* and *Sinensis pyramidalis* seem to be perfectly hardy with me. I have some growing on my place, and others around town, five to six feet high, which have come through all right so far.

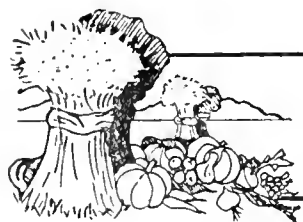
The *Pyramidalis aurea* is not quite so hardy; it suffered materially last winter.

The *Biota aurea nana* is without doubt one of the finest yellow evergreens grown. It is of regular conical habit, grows from two to two and one-half feet high, is very compact, and has a bright golden yellow color which it holds well all the year. In my opinion it is hardy in my locality. I have some that came through last winter all right, and some which suffered slightly. The *semper-aurea* is very similar, is equally hardy, but does not grow as compact. *Elegantissima* is yellow in the spring and during the summer, and turns a reddish brown in winter. It is a striking variety, is not quite as hardy with me as the last named. My opinion is that they would all be hardy if planted in a protected situation, or on heavy clay or gravelly soil. I believe they incline to grow too late in the fall, and go into our winter without being properly ripened, and consequently cannot stand severe freezing weather. Planting in a heavy or a dry gravelly soil has a tendency to correct that.

The Yews are another family that deserve more attention. They are slow growers, and for that reason are not very popular with nurserymen. Some varieties make good sized trees. They are perfectly hardy and hold their color well. The American variety (*Taxus Canadensis*), makes an excellent ground cover and holds its bright green color all winter in the shade. It will grow under evergreens and in dense forest. It makes an excellent hedge plant as well as a specimen.

I need not say anything about the mechanical part of planting, except to impress upon you the importance of not exposing the roots to drying winds or sunshine, if they are not to be balled, and if it is not convenient to have a tub of mud in the field, they should be dug a few at a time, laid in a pile and soil thrown over the roots until they can be taken to the shed and puddled.

I have seen nurserymen dig them and let them lie in the sun, without protection of any kind, until they had a load. The wonder is that any of them lived. If they did live, it took a long time for them to recover.



From the U.S.D. of A.

WORKING FOR "ALL-AMERICAN" EASTER LILIES

Government Flower Breeders Strive to Establish Bulb Production in this Country

When the Easter lilies bloom this spring at the Government experimental farms at Arlington, Va., across the Potomac River from the National Capital, the flower breeders of the United States Department of Agriculture expect they will have taken one more successful step toward proving that lily bulbs may be produced in this country, and that there is no good reason why Americans should be entirely dependent upon Japan and Bermuda for these stocks.

The lots now flowering show that florists need not fol-

low their custom of discarding bulbs that have produced flowers only one year. As one way of proving that bulbs do not lose their vigor and usefulness through one year's production, the Department of Agriculture men right now are flowering bulbs that florists always throw away. And they are growing them outdoors in the latitude of Washington—a procedure that has been demonstrated feasible. Florists have been skeptical about the use of bulbs year after year, because of their experiences with disease in imported stocks, but the Government men say that with care in handling there should be no more difficulty from diseases in the lily than in a score of other plants, provided the stocks are clean to start with.

"It should be noted," they say, "that a seed generation leaves the diseases behind—for how long will depend to a very large extent upon the conditions under which the plants are handled. No disease has yet appeared in our stocks."

The Government florists also are working to show commercial florists that they may produce their own bulbs of superior merit in one year's time from seed.

An important reason why Easter lily bulbs that flower in America should be grown in America is seen in the fact that importations of all bulbous stocks have ranged around a value of \$2,000,000 a year, and of this amount a large share has gone for Easter lily bulbs.

The Government work in this field has not gone far enough yet to justify public exhibitions of these stocks, but it is hoped that within a few years an "All-American" Easter lily show may be arranged as a final proof that lily bulbs may be produced in America just as well as in any other country.

QUARANTINE NO. 37

AMEND PLANT QUARANTINE TO ADMIT FLOWER BULBS

The quarantine governing the importation of nursery stock and other plants and seeds into the United States has been amended to permit the importation of lily bulbs, lily of the valley, narcissus, hyacinth, tulip, and crocus packed in sand, soil or earth, provided such sand, soil or earth has been previously sterilized in accordance with methods prescribed by the Federal Horticultural Board. Sterilization must be done under the supervision of an authorized inspector of the country of origin, who must certify to it. This provision is amendatory to Regulation 3 of the rules and regulations supplemental to the notice of quarantine, which required that such bulbs when imported must be free from sand, soil or earth. It was brought to the attention of the board, however, that dry earth is the only suitable material known for packing these bulbs, and experts of the Department of Agriculture advised that such material can be cheaply and satisfactorily sterilized by heat in such way as to involve no additional risk of introduction of dangerous plant pests.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902
Published monthly by
THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., April 1919

Subscribers to "Nurserymen's Fund for Market Development"

Losses by insect pests and disease, losses by
LOSSES fire, losses by drouth, losses by flood, losses
by frost.

Sure there are losses and always will be, some by pre-
ventable causes and others that are not. If any nursery-
men or any other business man for that matter, expects
100% from all his efforts, well he is either very inexper-
ienced or unbalanced.

Yet our statisticians gravely tell us one hundred millions
of dollars were lost due to the San Jose Scale and so imply
that if this insect had not been introduced into this coun-
try this amount would have been saved. Maybe it would
have been, but it takes a credulous nature to believe a
first class crop of peaches would have been raised any
easier or at less cost than if the San Jose had stayed at
home.

Some of us are apt to look back and imagine the earth
yielded her fruits more generously and at less cost of
effort and loss than at present, but she is a rather exact-
ing mistress and invariably gives favors about as earned.

Statisticians, entomologists, scientific farmers and gov-
ernment experts are quite useful, but are a comparatively
recent introduction into positions of power. The world
was fairly well clothed and fed before the book scientist
was very influential in industrial society, and while we
would not wish to do without them, they should not be
allowed to stampede public opinion by statistics of losses,
which are really no more existant than the fortune the
stock gambler would have made "if."

To exploit losses for the purpose of making the tax-
payers "come across" with the appropriation to prevent
the unpreventable, savors more of the politician than
the scientist.

Back of the learning in the world is the fundamental
law "By the sweat of thy face shalt thou eat bread."

Individuals may sidestep this fact, but collectively we
cannot escape.

We may reduce the sweating process by machinery,
by learning the life history of some atom of creation and
restricting its actions, and by artificially helping nature,
but it is merely borrowing from Peter to pay Paul but we
always have to settle up with Peter.

As long as the native vigor of any plant has not been
devitalized by unnatural processes of cultivation, it is
possible to raise a good crop in spite of all the diseases
and pests in the world.

Good common sense culture that was an acquired art
before the advent of printing, is after all still to be de-
pended upon to produce results in spite of all the newly
discovered and imported diseases and pests.

BUSINESS CONDITIONS Business conditions are naturally still
somewhat chaotic, yet from all nurseries
that have been heard from come reports
of good business, as many orders as can
be handled.

This in spite of the fact that the other lines such as
suburban and country homes are not as yet being built
and other things such as the demobilization, which pre-
cede real activity in nursery lines, have as yet barely
started.

The period of reconstruction must necessarily be a
trying, awkward one, after a world war that has so com-
pletely changed the old order of things.

We are fearful of unknown after effects of the war,
on labor, capital, politics, taxes, high prices, and every
phase of life which previously guided us in our actions,
yet the country at large, or the great majority, is greatly
trying to adapt itself to everything that comes along. It
grumbles and growls, reads the sensational reports of
Bolshevism, Government mis-management, but the great
majority keep quiet and saw wood, attending to their
own particular business as reaches out into new enter-
prises as far as they think conditions will warrant. This,
unfortunately is not far, but it really only needs strong
current of optimism to sweep through the country to
start things, and completely restore confidence in the
good sense of the mass. This may come at any time.
Perhaps signing the peace will bring it, or it may come
of its own accord, overnight, and start the wheels a hum-
ming instead of squeaking as they are at present.

The Manufacturer's Record pointed out the remedy
as follows:

DO IT NOW

Have you been planning to build a factory, a church,
a school, a home or even a garage?

Has your community felt the need of improving its
streets, its roads, its municipal buildings, its water or
sewerage systems?

Have you planned to improve or modernize your plant?
Then, do it now!

Don't wait on somebody else, don't wait to see if you
can get the last bottom notch in prices. Don't wait to
see if labor, struggling to find a job, can be squeezed
down to accept a few cents or a few dollars less per day.

Don't wait, in order to help break down prices of ma-
terials as well as of labor, but whatever needs to be done,
if the money is available, "DO IT NOW!"

Do it as a part of your work of patriotism, content to
write off a little extra cost if that should become neces-

sary. Perchance this may never be necessary.

You owe it to civilization against Bolshevism, you owe it to the soldiers who have offered their lives for you, to do all in your power to create employment, if that employment is in productive things which mean permanency.

Economically it would be unsound to create employment in building a house in order to tear it down later on; but if the house is needed, if the plant will be benefited by new equipment, if the church or the school or the municipal improvement has been delayed by the war, take up the work at once and push it through.

Employment is a deadly foe to Bolshevism. Profitable wages make for sobriety, integrity and patriotism.

Upon the active, aggressive work of men of broad vision, men who dare to do things for world welfare while working for personal advancement, men who are not narrow and niggardly in their vision, will depend the future of our country and of civilization.

A saving at the spigot of business and municipal expenditures just now might lead to a great outpouring at the bunghole.

Wise thrift is not always found in picayunish economy.

Then, if financially able, let your policy be "On with your work!" You owe a responsibility to the world.

Do it now and you will be wise in your day and generation.

Obituary

THE LATE JONATHAN B. MOREY, JR.

A great many nurserymen and friends read with regret the announcement of the death of Jonathan B. Morey, Jr., Dansville, N. Y., as published in our last issue. News of his death came just as we were going to press.

Mr. Morey was well known to the trade and his death means the loss of a much beloved man not only at Dansville, where he was born and always lived but in nursery trade circles all over the country.

He was the son of Jonathan B. Morey who represented the county in the assembly in 1860, 1861, 1872 and 1876, who died a few years ago; and his mother was formerly Miss Laura Sweet, the daughter of Sidney Sweet, who was state senator in 1856 and 1857, who died in 1887.

Still in the prime of life, only 52 years, a few years ago he contracted tuberculosis, although he put up a strong fight against the disease, death overtook him March 2nd.

Mr. Morey was a prominent figure at home, being actively interested in the religious, social and political life of his town.

Graduating from the Rochester Normal College he became associated with his father in the management of the nurseries and other interests.

He served as postmaster for six years. He also served as president of the village and the Board of Education and was a vestryman of St. Peter's Memorial Episcopal church.

Mr. Morey is survived by his wife, three daughters and a son, Jonathan Morey.

The funeral services were conducted by the Masonic fraternity and were attended by practically all the nurserymen in the district.

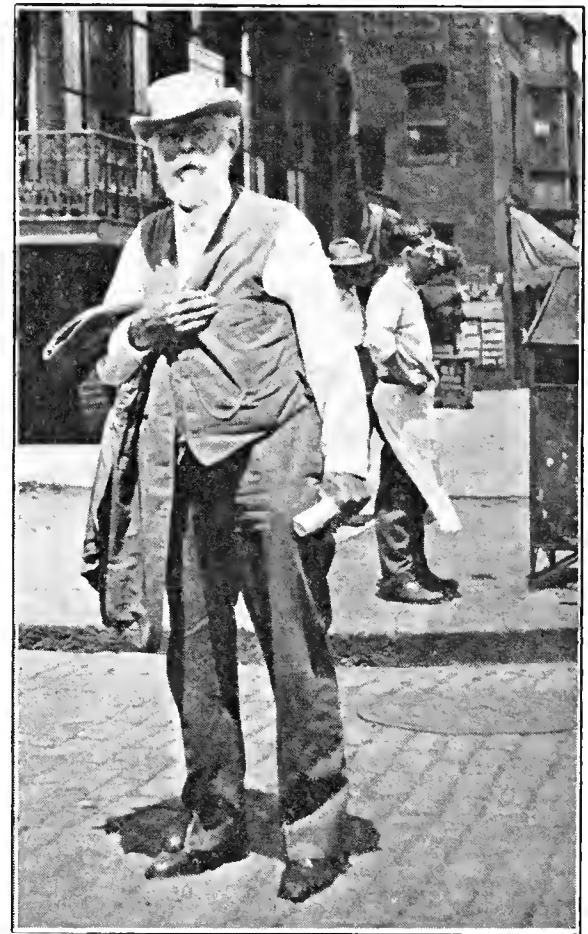
C. S. HARRISON, YORK, NEB.

Nurserymen all over the country will read of the death of C. S. Harrison, York, Neb., with much regret. Those who attended conventions will recall his officiating as chaplain. His wonderful oratory as an apostle of beauty made him unique among nurserymen.

Mr. Harrison was a pioneer in the true sense of the word. Born in the State of New York, November 24th, 1832, he went with his parents to Illinois in 1844. He worked on a farm until he was 21, putting himself through college in Chicago, paying his way by braiding whip lashes at a cent and a half a foot. In his autobiography he relates that he made a mile of whip lashes one winter.

When he left home he had \$5.00 in money. Living on 65 cents a week he returned home at the end of his college year with \$10.00 in his pocket.

He began work in the missionary department of the



The late C. S. Harrison as he appeared at the Cleveland Convention

Congregational Church, and had a very active and varied experience. He went over the new prairie country, preaching, organizing and building churches. Being compelled for a time because of physical ailment to change his work, he undertook colonization work for the Burlington Railroad in Nebraska. While working in this capacity he did much to establish colonies of homes, even in advance of the Railroad. True to his character and training he stood and fought for the highest type of morality and was a bitter enemy of the saloon and anything that had a tendency to lower the standard of Christian living.

He was such an ardent lover of Nature that when he settled in York his love of plants induced him to start a nursery. His writings on plants are well known.

His last work was a book entitled the Gospel of Beauty and Intelligence in Trees, a volume which gives full sway to his descriptive power and his love of Nature.

He closed a full and active life at the age of 87.

GOD'S RICHEST GIFTS ARE FREE TO ALL

A Tribute to Nature by the late C. S. Harrison

Many of the richest gifts of Nature and providence are free to all. You may be poor, yet you own an interest in the glorious sun, in the joy of the morning and the sweet repose of the evening. You can wander, as well as others through the forest of parks of our glorious land. Others may ride, but you can walk, take time to visit with dear old Mother Nature. She has been waiting for you and what preparation she has made for your coming. She throws open the gates of her picture gallery and lets you behold a pageantry of splendor no brush can produce or pen describe. You can see the fleecy clouds touched with tints of carmine edged with opal, lazily drifting through the azure and coquetishly resting in the lap of the mountains. You can study the trees and visit the flowers in God's great garden He has kept so well. You can breathe the fresh air, electric with life which thrills you with the joy of living. What millionaire in his princely auto can compare with a lover of nature, who with a sack of flour and a little bacon, with staff in hand, who leisurely plods along, feasting his soul at the banquets of God, a loyal son of nature, brother of the forests and mountains?

Though the toilers cannot afford jewel caskets they have an equal interest in the glorious sun and in all the colors woven in the rainbow. The poor woman, to satisfy her soul hunger plants a little patch of flowers and all the unseen forces of nature come to visit and aid her, and she has the finest flowers of all, owing to her loving care. She knows them, she studies their wants and the ladies of the palace gladly sit at her feet as she tells them how to treat these royal visitors, the flowers. Her joy is great, if not greater than that of the rich woman who takes out her jewel casket and fondles her gems, for sometimes she does this with fear and trembling, lest they be stolen. The soul of this woman attuned to the beauties and harmonies of nature is far happier than the other and when winter comes her windows are lined with the delights of summer and so her jewels last all through the year.

One who leads the simple life can say, "The sun, the moon, the stars are mine; the free fresh air, the shower, the light which discloses all the forms of beauty." My neighbor has rich grounds, I can feast my eyes upon them for he plants for me as well as himself. There is often an altruism in the planting of private grounds so the passer by can share the delights of the owner. Sitting on the porch with a friend in Brookline in Massachusetts, where there are more millionaires to the acre than any other city in the union, I said to him, "You seem to own a good many flower gardens, I can see a dozen from where we sit." "Yes," he said, "we plant for each other, we have our flowers in the front yard where we can all own those belonging to a neighbor. Often one will plant what another has not. Flowers are more beautiful than grass and dandelions, so we plant for ourselves and also for the poor working girls and the other toilers as they take their evening walks. Their eyes own them as well as ours and we are glad to contribute to their enjoyment and to hear the expressed delight of the children as they walk with their mothers at the close of day."

AN APPRECIATION OF A GREAT CHARACTER

*Tribute to the Memory of Charles Simmons Harrison
Read at His Funeral Service by T. E. Sedgwick.*

Friends: It is my privilege to lay a more enduring wreath upon the bier of our friend and benefactor.

Truly, what we say here matters nothing to him of whom it is said, but it is well worth while for us to pause a few moments beside these ashes while we recount some of the most interesting and beneficent qualities of this remarkable man.

I understood him as well, perhaps, as such a unique and many-sided character can be fathomed. I knew him in his ambitious young manhood, in the far-flung activities of his middle life, and in the unflagging usefulness of his ripened years.

His most prominent characteristic was his unfailing loyalty to his religion and his God. It can be safely said he never for a moment doubted the reality of his religion, nor that it was his duty to stand firm for the right, as God gave him to see the right.

When an issue arose the only question with him was as to the right side, and, having decided, he was not an idle spectator, nor a mere soldier in the ranks. He was a masterful leader, a bold champion, and a furious fighter for the right.

Loyalty to his friends was another characteristic prominent in his life. He would go as far as right and truth would let him to assist one in whom he was interested. Here, over his silent remains, I am pleased to acknowledge the benefit of this loyalty on more than one occasion.

Mr. Harrison was never idle. The amount of work, mental and physical, that he did was prodigious. He was highly educated and possessed a most admirable command of language. His addresses were eloquent, often thrilling, and sometimes approached the sublime.

No man who loved flowers as he did, and who so adored nature in all her gorgeous panoply, could be any thing but tender and kind. Beneath his armor beat a tender heart, easily and deeply touched by suffering and sorrow. I speak of him as he was before the ills of age and the inroads of disease had multiplied upon him. His enthusiasm was no greater in his contests with evil than in his sympathy with the poor, the suffering and the sad.

He was always a leader, brave, strong and courageous. He hesitated at no opposition nor feared any foe. In every community where he lived he was a power for good all the time.

What he did for York is a story of itself, and may be told on some future occasion by some one better qualified to tell it. Those who have recently come to York may wonder why this city is so much larger than any of the surrounding county seats, and why it is so free from crime, why it has so many beautiful trees and so choice a population, but the early dwellers know. They saw the fight that was always led by Mr. Harrison to drive out saloons, to drive out all that is against good citizenship and good morals, and with one accord they yield the palm to him.

"Because he hath set his love upon Me therefore will I deliver him. I will set him on high because he hath

known My name. I will be with him in trouble; I will deliver him and honor him. With long life will I satisfy him, and show him My salvation." More than satisfied with length of days he now sees the salvation of the Lord. God's promises are kept.

No fulsome praise of Mr. Harrison is necessary in this community, where he lived and labored half a century. Nor would it be acceptable to him. For with all his attainments he was exceedingly modest. I once received a commission from a well known Philadelphia paper to write a sketch of his life, but he was so insistent upon his limitations, and afraid I would overdraw it that I thought I could not do him justice, and I declined to write the article.

This much can be said of him, however, without exaggeration, and better epitaph was never written: All his long and eventful life he worked earnestly, vigorously, and fearlessly, to make men and women better, to make the world safe for righteousness, and to bring the Kingdom of God nearer to men.

"You may journey to the sunset and from sunset to the sea, but you'll find not in the forest so staunch, so firm a tree."

ORNAMENTAL TREES AND SHRUBS OF MERIT FOR NEW ENGLAND

*Read by Mr. Wm. H. Judd of the Arnold Arboretum at the
Eighth Annual Convention of the New England
Nurserymen's Association held in Boston,
January 28 and 29, 1919*

Continued from last month

Oxydendron arboreum is an old plant, but still seldom seen but should be on account of its flowering in fall. It grows into quite a small tree and bears erect clusters of andromeda-like flowers, and later the prominent seed-clusters among the scarlet foliage make it a conspicuous shrub. It is easily raised from seed and should be given a sheltered situation.

Sophora Japonica is a fall flowering tree of a wide spreading habit and is usually covered with dense clusters of creamy-white pea shaped flowers in August. Generally a few years old before it begins to flower, it is nevertheless a rapid grower during its early years.

Koelreuteria paniculata is seldom seen although another old plant. This is a small tree and flowers about the end of July with large erect clusters of conspicuous yellow flowers standing above the dark compound foliage. The flowers are followed by large bladder like fruit.

Callicarpa Japonica attracts the attention of all who see it in the late fall after the foliage falls off and the clusters of violet colored fruit are exposed to view.

Among evergreens it is too early to say anything definite about the new Chinese Spruces, but *Abies Holophylla* promises to be one of our best new Firs. It grows rapidly and never suffers from cold; and is a native of Korea. A large number of seedlings are now growing from seed collected by Mr. Wilson in Korea a year ago, but there are one or two plants in Massachusetts twelve years of age.

The so-called *Picea Albertiana* is proving very popular and is a good plant for the rockery or a dwarf collection, but I believe as it gets older it will become bare and unsightly at the base.

Considerable interest has been taken with the Asiatic cherries the last few years. One of the best and most hardy being *Prunus serrulata sacchaliensis*. It grows into quite a large tree and has pink and rose colored flowers. Bears fruit freely, which is small and almost black. Seed will germinate in the spring after being sown the previous fall, and is suggested as a good hardy stock for most of the tree like cherries.

Prunus subhirtilla with light rose colored flowers is a spreading flat-topped small tree very freely flowered and should be reproduced from cuttings, or grafts as the seedlings as a rule take the upright form of growth. *Prunus pendula* is a form of *subhirtilla*, deep rose colored in flower and is an excellent plant for a front lawn.

The *Forsythias* are some of the most beautiful plants ever introduced from China, and some of the hybrids surpass the types for abundance of flower and especially *Forsythia intermedia spectabilis*, (*Forsythia Fortunei viridissima*).

Viburnum Carlesii is the most fragrant of all the Viburnums and the flowers are pink in bud, changing to white, open in succession for several weeks. It does not grow very large and is ideal for rockery.

Malus halliana var. *Parkmanni* is another good flowering apple to include in any list.

The tree grows in an upright spreading fashion, leaving the centre open, and the leaves as they unfold are of a deep orange color. The semi-double flowers are rose colored and hang down on long pendulous stems.

A densely branched low growing shrub is *Lonicera Syringantha Wolfii* with long drooping branches and clusters of fragrant violet colored flowers (Middle of May.)

How many nurserymen carry that beautiful old *Syringa Rothomagensis* (*chinensis*) or Rouen Lilac as it is called? It is one of the handsomest, hardiest, and most vigorous of all the lilaes. It bears enormous clusters of small flowers of the ordinary lilac color. (It is a hybrid between *Persica* and *vulgaris*.)

A late flowering Lilac known as *Syringa Wolfii* (from middle to end of June) is very handsome bearing dark bluish purple flowers very profusely. It is a native of Mongolia and has been in the Arboretum since 1906. The flowers are not fragrant but the color is very attractive.

The American Azaleas are going to be grown in quantity in the future. There are ten species known to the U. S. and we have nine growing at the Arboretum. They cover a period from early May till the end of July from *Vaseyi* to *Viscosum*.

Azalea Vaseyi that flowers in early May grows into quite a tall shrub with slender stems and the small compact clusters of pink flowers appear before the leaves. In its native haunts, it grows fifteen feet high.

Rhododendron canescens follows it very closely and bears beautiful rose pink flowers. In groups nothing surpasses *R. Calendulaceum*, the most showy of all the American species. The flowers vary in color from bright yellow to orange and shades of red. It seeds profusely and is a ready means of propagation.

Those who visit Europe in the spring never fail to ad-

mire the beautiful "Golden Chain" trees, *Laburnum vulgare*. Although that variety is not hardy here, we have one that will grow not quite so large but equally as pretty, namely, *Laburnum Alpinum*. This is the handsomest yellow flowered small tree that can be grown in New England and curiously is little known. It seeds freely every year and a quantity usually spring up under the tree.

At the end of June and lasting in flower for three weeks is a large shrub called *Halimodendron Argenteum*. This is a native of Siberia and is usually covered with pea-shaped, fragrant flowers of a pale rose color, and their beauty is enhanced by the silvery color of the foliage. It is one of the best summer flowered shrubs and the seeds if left on the shrub over winter germinate readily. It will also root from cuttings.

One of the largest growing Honeysuckles is *Lonicera Maackii podocarpa*. Its desirability lies in the fact that the large shiny scarlet fruits are only ripening in late October and November.

HOW TO BECOME FAMOUS

It is taken for granted that every nurseryman, worthy of his profession, wants to grow something or do something in his line a little better than the other fellow, and after all that is all there is to fame. The reason most of us who try do not become famous is because we go in the "free for all" instead of specializing. The world is always quite ready to recognize the fellow who knows more about one particular subject, or can do one thing better than anyone else be it ever so simple.

The nurseryman who grows a lot of things fairly well is not so likely to become so famous as the one who grows one thing better than anyone else in the country.

Most of us are ready to admit the reasonableness of the above but the main thing is how to do it, and at the same time pay our bills and meet other obligations.

One way for the nurseryman is specialize on one thing without neglecting the others. As money is the common measure of success and is usually essential in carrying out plans or schemes of any kind, it is advisable to select a plant or group of plants for which there is a ready market or at least a potential one, another important thing is to choose something that suits your particular local conditions of soil, etc. It is just as well to have the stars in their courses with you as against you, and then "go to it."

There are numerous plants and groups of plants that undoubtedly have a future.

Take for instance, the following:—Flowering crabs, Lilies, Hydrangeas, Dogwoods, Rhododendrons, Azaleas, Barberries, Crepe Myrtles, Viburnums and Privets. Among these are plants suitable for a northern nursery, Southern nurseries, those with sand, peat, or heavy loam, and all have almost unlimited possibilities of develop-

ment both in the improvement of the plants and in their commercial qualities.

The first essential is to have a liking or interest in the plants and then study them at first hand.

If we select the flowering crabs for a specialty, the next thing is to set aside a piece of ground for the aboretum or stock ground and start gathering together a collection from every available source not only from other nurseries but also from botanical gardens and private sources.

It is safe to say, if the interest holds until the major portion of the collection flower and fruit, you will know more about that particular group of plants than the average nurseryman and will be able to form pretty good opinions as to those most likely to be profitable to grow in quantity and exploit, also the best way to commercially propagate them.

The man who has not the patience to wait for results and wants immediate returns had far better stick to staples, but the man who has a genuine love for plants will usually find full compensation for well applied efforts.

Raising new or improved varieties is a slow process at best a life times' work rarely producing more than a step in advance of some other man's work when viewed as a whole.

But in a group of plants such as the flowering crabs, a practical study of them under growing conditions on the nursery might uncover some little known sort that would only need to have its merits known to become as popular as a Crimson Rambler Rose or a *Spiraea Van Houttei*.

Becoming recognized as an authority upon a particular kind of plant or group of plants is usually worth while even from a commercial point of view.

MR. ROCKWELL ON THE JOB

Mr. F. F. Rockwell, Mgr., for the Nurserymen's National Service Bureau, is on the job and judging from his writing in the Philadelphia Press, Farm, Garden and Poultry Magazine he is telling the public what they should know about the nursery business.

It is just such information as the following that needs to be disseminated.

Very few persons realize the peculiar difficulties which are involved in the nursery industry. Anyone at all familiar with business realizes the importance of a quick "turn-over" in making a business successful. In the nursery business the "turn-over" on many items is only once in two or three years. The larger sizes of ornamental trees and of evergreens are not sold until they are several years old. Added to this is the great element of risk from injury to stock from uncontrollable conditions, such as severe winters, like the one we had last year, hailstorms, which may completely ruin in a few minutes the entire product of several years' work, and drought. Then, too, the growing and selling of nursery stock is a "seasonal" business of the worst kind. Practically all the work of growing has to be done during the six or seven open months of the year, leaving a bad "slack" period through the winter months, and the period of shipping out

stock, in which stock can be shipped out, is even more limited, as everyone who has bought throughout the entire year wants to plant during a few weeks in the early spring, or in the case of a limited number of things, two or three weeks in the fall.

From all of this it is very evident to anyone who stops to think that the grower of nursery stock has his problem. The buying public as a whole has not taken these matters into consideration merely because it has not been informed concerning them. Too many buyers take the attitude that the nurserymen whose orders have been piling up for six or eight months should be able to get out an order as promptly as the corner grocery store, which is making deliveries fifty-two weeks in the year. All this has led to an impatient dissatisfaction on the part of many buyers which would not have existed had the facts been realized.

CELASTRUS ARTICULATUS

Two incidents last December suggested the thought of great possibilities in *Celastrus articulatus* as a popular ornamental plant.

The first was a lady inquiring where she could procure some fruiting branches of the Bitter Sweet for indoor decoration, as it was the only berried plant she knew that held its fruit for any length of time when cut and brought into the house.

The second one was the sight of a plant grown in standard form and literally covered with its orange scarlet fruit.

The Bitter Sweet, both the *Celastrus scandens*, the American Bitter Sweet, and the *Celastrus articulatus*, Japanese Bittersweet, are both trailing plants, or shrubby vines that form thick woody stems with age, like the Wistaria and it is only necessary to keep them staked and pruned to grow them in any form desired.

It would be worth while for some enterprising grower to line out a good stock of young plants in the nursery rows, prune them to single stems, tie them to good straight stakes, some of them could be twisted around the stakes so as to get a corkscrew effect to the stem when the plants could stand alone, as they developed prune back to form heads from two to five feet from the ground, covered with their brilliant colored fruit, they should be ready sellers at good prices around the Christmas holidays.

EXPORTS OF APPLES FROM UNITED STATES

The exports of apples, green or ripe, from the United States during the fiscal year ended June 30, 1918, were as follows, by countries of destination:

Country.	Barrels.	Value.
Denmark	168	\$1,279
France	5	51
Iceland and Faroe Islands	891	5,874
Italy	65	563
Russia in Europe	12	180
England	1,766	9,589
Bermuda	1,695	8,229
British Honduras	399	2,521

Canada	457,948	1,721,424
Costa Rica	142	841
Guatemala	929	4,677
Honduras	904	6,089
Nicaragua	295	1,749
Panama	5,104	34,844
Salvador	803	3,911
Mexico	57,465	334,466
Miquelon, Langley, etc.	11	44
Newfoundland and Labrador	1,344	9,758
Barbados	96	664
Jamaica	507	2,780
Trinidad and Tobago	661	3,375
Other British West Indies	348	1,968
Cuba	30,854	192,199
Danish West Indies	228	1,326
Dutch West Indies	150	1,085
French West Indies	95	579
Haiti	586	4,702
Dominican Republic	1,355	7,590
Argentina	29,176	202,613
Bolivia	2	9
Brazil	15,347	115,611
Chile	2	20
Columbia	726	3,815
Ecuador	4	20
British Guiana	233	1,237
Dutch Guiana	75	459
Peru	8	69
Uruguay	3,634	26,345
Venezuela	1,113	9,058
China	1,910	8,722
Japanese China	26	160
British India	14	67
Straits Settlements	109	590
Dutch East Indies	44	221
Hongkong	1,940	8,986
Japan	83	449
Russia in Asia	3	32
Australia	7,603	34,249
Other British Oceania	40	195
French Oceania	114	620
German Oceania	63	314
Philippine Islands	8,297	36,693
British West Africa	17	180
Total	635,409	2,813,091

Commerce Reports.

THE NEW YORK STATE MOTOR FEDERATION AND THE STATE COLLEGE OF FORESTRY AT SYRACUSE COOPERATING IN THE DEVELOPMENT OF ROADSIDE PLANTING IN NEW YORK

Marked interest has been shown in the planting of trees and shrubs along improved highways of the state since the recent announcement of The New York State College of Forestry at Syracuse that a definite plan of procedure had been laid out in cooperation with the New York State Motor Federation for an initial demonstration planting of the section of highway between Syracuse and Utica. The preliminary survey has been completed for this entire

section by the College of Forestry, covering a distance of approximately 60 miles and the final planting plans are now under way and will be finished within the next month or two.

An added incentive for the development of roadside planting has been brought about thru the efforts of the College of Forestry to interest the State in plantings as memorials to our hero dead. It has been suggested that suitable tablets be erected at certain intervals along these newly planted roadsides in memory of the brave men whom we wish to honor. Similar work is being taken up by cities and states outside of New York, especially those thru which the Lincoln Highway passes.

THE PLANTING OF THE HIGHWAY BETWEEN SYRACUSE AND
UTICA TO BE MADE A NATIONAL DEMONSTRATION OF
HIGHWAY IMPROVEMENT

The preliminary studies made in the small section of improved highway by the College of Forestry has caused widespread demand for the beautification of highways. It is believed that a small section of highway planted properly with trees and shrubs will be a real incentive for the carrying out of this work not only thru this state

but in other states. Aside from the ornamental value which trees have in adding to the attractiveness of the highway it has been found that they have a real value in protecting the roadbed from the heat of the sun in summer, thereby making roadbeds more durable. In many instances trees where properly planted may be of considerable value in preventing drifting of snow on highways. Again, such plantings may serve as wind breaks in protecting farm lands from severe winds.

STATE TO BE ASKED TO BEGIN HIGHWAY PLANTING IN 1919

The New York State Motor Federation proposes to introduce a bill into the Legislature calling for the appropriation of sufficient funds for the carrying out of the beautification of the highway between Syracuse and Utica as a demonstration of what may be done elsewhere throughout the state. With the state paying out millions of dollars annually for the construction and maintenance of highways, it seems reasonable that a few thousand dollars be expended annually to carry out such an important project as roadside development. It is hoped that those interested will take an active part in bringing about the beginning of a system of beautification of highways the present year.

Notes from Arnold Arboretum

Native and Foreign Trees

POPULUS MAXIMOWICZII. This tree is a native of eastern Siberia, eastern Saghalin and northern Japan. It is the largest tree of eastern Siberia where it sometimes grows eighty feet high with a trunk six feet in diameter and a broad head of massive spreading branches. On young trees the bark of the trunk is smooth and pale brown, but on old trees it becomes thick and furrowed. This Poplar was first sent to the Arboretum from Petrograd in 1878 but its distinctive characters were not recognized until some years later. The plants now in the Arboretum were propagated from the Petrograd tree which disappeared when the Poplar Collection was rearranged on the southern slope of Bussey Hill. They are now twenty years old and about thirty-five feet high. They have never been attacked by borers which make the cultivation of the Balsam Poplars and some of the Cottonwoods so difficult and unsatisfactory, and their leaves apparently have no attraction for leaf-eating caterpillars. The leaves are green and lustrous on the upper surface, silvery white below, three or four inches long, and two or two and a half inches wide. The fruit, which is fully grown in May, unlike that of other Poplars, remains on the trees here until September without opening.

Populus Maximowiczii is not only the handsomest and most satisfactory tree in the Poplar Collection but it is one of the few large exotic trees with deciduous leaves which can be recommended for general planting in the northern states. For the list of such trees is a short one. It includes the Ginkgo, which stands alone in its class and is one of the great trees

of the world. The only survivor of a race which was once widely spread over the northern hemisphere, this inhabitant of eastern continental Asia is long-lived and able to support extremes of heat and cold, and to grow equally well in Massachusetts, Georgia and California. The Ginkgo is appreciated and has been largely planted in the city of Washington, but in other parts of the United States the beauty of this tree when it gets beyond its juvenile habit is not understood. *Pseudolarix* is another Chinese tree which is alone in its class and, although discovered only seventy years ago, it has been long enough in this country to show that it is perfectly able to adapt itself to the Massachusetts climate. This is surprising for the home of *Pseudolarix* is on low mountain slopes not far from the coast and south of the Yangtse River. The European Larch, although less picturesque than the Larch of northeastern North America, is a larger and more valuable tree, and the experience with it in New England shows that it is a tree which can be depended on to grow here rapidly to a large size.

The two Silver Poplars of Europe (*Populus alba* and *P. canescens*) flourish in the United States where they have grown to a large size and are as much at home as they are in their native countries. The pale color of the foliage of these trees is unlike that of any of the American species, and their hardiness and vitality make them useful for planting in exposed positions. The Silver Poplar of northern China (*P. tomentosa*) is one of the handsomest of all Poplar-trees. It has grown well in the Arboretum but it is too soon to form an opinion of its value in this country. Two European Willows, *Salix alba* and *S.*

fragilis, and some of their varieties, have become completely naturalized in the northeastern states where they grow as large or even larger than in Europe and are important additions to the North American silva. The Chinese Weeping Willow (*S. babylonica*) is not always perfectly hardy in Massachusetts, but further south is valued as an ornamental tree. The so-called Wisconsin Willow, a natural hybrid between this Chinese Willow and *S. alba*, and other hybrids of the same parentage are useful ornamental trees in the northern states.

Cercidiphyllum is the largest deciduous-leaved tree of Japan, and although it was introduced into the United States only forty years ago it gives promise of becoming a permanent addition to the trees of the largest size which can be successfully grown here. The Chinese White Mulberry (*Morus alba*) is a larger and hardier tree than the Mulberry tree of the eastern states, and is perfectly at home here. Probably the most generally useful, however, of the large deciduous-leaved trees which have been brought into the northern states is the Ailanthus of northern China which must have been growing here for nearly a century. It grows rapidly and is perfectly hardy, and it can resist the heat, drought and dryness which trees have to suffer in our cities better than any other tree with the exception, perhaps, of some of the Poplars. The Ailanthus, too, produces handsome wood valuable in cabinet-making.

The Japanese White Oaks are handsome trees and produce valuable timber. They grow well in the Arboretum and give every promise of living here for many years. Under the most favorable conditions in Japan they do not become as large as our native White and Bur Oaks, and do not produce more valuable timber than these and several other American White Oaks. All foreign Oaks which can be induced to live here are proper inhabitants of the Arboretum where they are needed for study and public display, but for general planting the Oaks of other countries will never be used in New England in preference to the native species. Of all the Elm-trees of the world not one equals in grace and beauty the White Elm of eastern North America (*Ulmus americana*). It is a true lover of the country, however, and only shows its greatest beauty in the deep moist soil of a New England interval. Moved to the city it soon languishes, for it resents city conditions of overdrained soil, smoke and bad air. One of the so-called English Elms is better able to thrive in cities where the American Elm fails, and in Boston and its suburbs the English tree has been growing for more than a century and has proved itself valuable. None of the exotic Ash-trees are really valuable here. For general planting in the eastern United States no Ash is as good as the American White Ash (*Fraxinus americana*) for the decoration of parks and roadsides and the production of timber. The European Ash (*Fraxinus excelsior*), which is a magnificent tree in some parts of Europe, is a miserable failure here, and the great Ash-tree of northeastern continental Asia and northern Japan (*F. mandshurica*) can barely be kept alive in New England. European Birch-trees grew well in the northern states until they were attacked by a borer which destroyed them by thousands. The slender drooping branches of *Betula pendula* make it an interesting and attractive object but it is not as handsome a tree as the native Canoe Birch (*Betula papyrifera*) which

is the handsomest of the white-barked Birches and in one of its forms exceeds all other Birch-trees in size. *Betula Maximowiczii* with pinkish bark, and a native of northern Japan, is, however, a handsomer tree than the Canoe Birch. It has been growing in this country for twenty-five years, and although it has grown well and is perfectly hardy here it is too soon to speak of its permanent value.

The pale gray bark of the trunk and branches of the American Beech makes it in winter the most beautiful of all Beech-trees, but as a planted tree it does not behave as well or grow as rapidly as the European Beech which, in spite of its darker colored bark, is a better tree for the decoration of our parks. The northern Linden (*Tilia glabra* or *americana*) is a noble tree in the northern forests where in deep moist soil it sometimes grows to the height of one hundred and thirty feet and makes a trunk four or five feet in diameter, but it does not take kindly to cultivation in a climate as warm as that of Massachusetts. Planted trees grow slowly here; the leaves are usually disfigured by red spiders and turn brown and fall during the summer. There are a number of Linden-trees in the middle and southern states but little is yet known about them as cultivated trees, and a planter who wants Linden-trees had best use some of the European species. There are five of these, and the three species of western Europe have been so thoroughly tested in the United States that it is possible to say that they are among the most valuable trees which have been brought here from foreign countries. The most satisfactory of them here is *Tilia vulgaris*, a widely distributed but rather rare tree in Europe and believed to be a natural hybrid between the other western European species *T. platyphyllos* and *T. cordata*. There are large specimens of this Linden in the suburbs of Boston. No American Horsechestnut or Buckeye can compare in size or in the beauty of its flowers with the species of southwestern Europe (*Aesculus Hippocastanum*), which is well known to many Americans who have never heard that there were Horsechestnut-trees growing naturally in the United States. The European Horsechestnut is another of the great trees of the world. It is as much at home here and grows to as large a size as it does in western Europe. Few trees have more conspicuous flowers or foliage of deeper green. It thrives, however, only in deep rich soil and usually resents city conditions. In some old gardens in Salem, however, there are as noble Horsechestnuts as can be found in the United States or Great Britain. It is a miserable street tree, as can be seen in Paris, where the leaves turn brown and fall by midsummer, and in New York and Boston where fortunately it has not been generally planted. Among the Maples of large size which have been planted in the eastern states only the so-called Norway Maple (*Acer platanoides*) has shown real power to flourish here. It is a smaller and less beautiful tree than the native Sugar Maple, but the Sugar Maple, too, resents city conditions and objects to living at the seashore, and as the Norway Maple has proved a valuable tree for city and seashore planting it must be considered one of the really valuable foreign trees introduced into this country. The Old World Walnut-tree (*Juglans regia*) sometimes called English Walnut or Persian Walnut, although it is a native of China, is a handsomer and more valuable tree than any

of the American Walnut-trees, but unfortunately it is only doubtfully hardy in the northeastern states and will probably never grow to a large size here or produce the great crops of nuts and the timber which make this such a useful tree in many parts of the world. Chestnut-trees (*Castanea*) are fast disappearing from the United States as the Chestnut-tree disease spreads, and there is now little interest in drawing a comparison between the American and foreign species. The European Chestnut is not hardy in Massachusetts. The Japanese Chestnut is a small tree of no great value, and the Chinese *Castanea mollissima*, which it is hoped may prove resistant to the disease, has only been in the country for fifteen years. It has proved hardy in the Arboretum and produces a little fruit here.

It appears therefore from the experience gained in Massachusetts during about a century that only the following deciduous-leaved trees of large size have proved themselves to be worth general planting in the northeastern states for ornament or timber:—the Ginkgo, the *Pseudolarix*, the European Larch, three species of Poplar, three Willows and their hybrids, the *Cercidiphyllum*, the White Mulberry, the Ailanthus, the European Beech, the English Elm, one Birch, three Lindens, the European Horsechestnut, and the Norway Maple, twenty in all. At the end of another century the record of the Arboretum will, it is to be hoped, be able to tell a story of greater successes.

Nurserymen Attention

There will be no Raffia for budding this Spring.
What will you use?

Try "BUDTIE"

10,000 lbs. sold to nurserymen last year.

Write for samples and prices.

Thomas B. Meehan Co.

INTRODUCERS OF "BUDTIE"

DRESHER

PENNA.

FOR SALE

FOR SALE—On account of the death of the owner. A thoroughly equipped Wholesale and Retail Florist Business. 3 Greenhouses, dwelling house with all conveniences, 3 acres of land, all planted and ready to continue the established business. Fine location on State Road between Camden and Atlantic City.

L. R. LEDDON, Clayton, N. J.

WANTED

WANTED—Car load of Rhododendrons, maximum, and Catawbiense, 3 to 6 ft. Please state prices.

STONY HILL NURSERIES,
Glenshaw, Pa.

U R

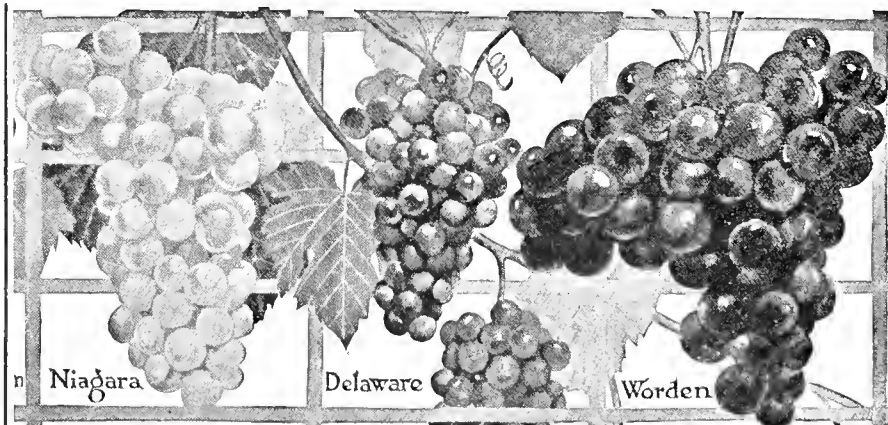
reading this advertisement.

Yours in the

NATIONAL NURSERYMAN

Would be Read by Thousands

Address HATBORO, PA. office for Rates



T. S. HUBBARD CO.

Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting

Established 1866

Send for Catalogue

AMERICAN FLORIST'S TRADE DIRECTORY

Price \$3.00, Postpaid

For Sale By

NATIONAL NURSERYMAN PUB. CO. Inc.,

HATBORO,

PA.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance.

FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

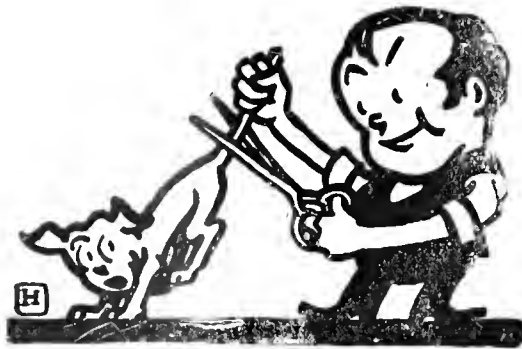
Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.



Let's Cut the Tale Short And Get Down to Facts About the Nursery Situation

WHY put off joining the organization for Market Development?
What is there that can be said for not doing it; that can't be
overwhelmingly met with ten times the reasons *for* doing it?

1. One big industry after another has been successfully organized. You'll admit that.
2. Little industries have become big ones after organizing. You can't deny that.
3. Profits have been increased. Shipment problems overcome. Public suspicion turned into public confidence. Everybody satisfied.
Do you mean to say an organization can't do the same thing for the nursery business?
4. Take the hardware industry; the citrous fruit growers, the cypress, white pine and red-wood lumber dealers; the fertilizer manufacturers; the publishers, the advertising men themselves - - -

What is their condition today, compared with what it was before they organized? Ask any one in any of these businesses—they will tell you that ORGANIZATION did more to make their business safe, profitable and respected by the buyer than anything they were ever able to do as individuals!

5. In everyone of these industries there were plenty who at first sat back and entertained *themselves* by throwing buckets of cold water.

- Ever and anon they croaked thusly:
"It can't be done." "Our business is different."
"Can't be organized." "Can't be standardized."
"Too many crooks to deal with in our business."
6. But put this in your jimmy-pipe and smoke it until you've got the full rich flavors.
Every one of these lines was organized.
They overcame their problems.
What has been done, can be done. You won't deny that.
7. The sooner you stop putting sand in the bearings, and start using oil; the sooner we can get the nurseries smoothly organized.
That's common sense, isn't it?
8. If everybody gains, you gain with everybody.
What do you care how much business your present competitors will get, if you get as much as they will be getting?
Isn't kicking against that, Kicking yourself?
They gain. You lose.
9. Then stop hanging back. Do your bit along with the rest of the bunch. At least give your encouragement to your fellow-nurserymen, who are giving so liberally of their time; and their money, trying to make your business and theirs a better business for all.
Why don't you subscribe? Send it today.
Let us keep you in touch with what's done, what's being done, and what's going to be done.

DO you know that we stand ready to supply your home paper with our series of business making articles, on "Improving the Home Grounds?"
Shall we send them? Can't you get your home town school or church, to use our illustrated lectures?
They are mighty interesting.
Cost them nothing.

H. H. Rockwell

Manager.

NURSERYMEN'S NATIONAL SERVICE BUREAU

220 West 42nd Street



New York City

When writing to Advertisers please mention the National Nurseryman.

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

Siberian Irises

Beautiful in planting effect

Ideal for cut flowers

The best varieties—white, purple, blue

Send for list

ORONOGO FLOWER GARDENS

Cartersville, Mo.

IRIS

For Spring Planting

Send for Catalogue

PETERSON NURSERY

30 N. LaSalle St.

Chicago, Ill.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myroholan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

WE OFFER

Grape Vines, Currants and Gooseberries

in all varieties and grades, also

Grape and Currant Cuttings and Light Grade of Vines for

Lining Out in Nursery Rows

WRITE FOR PRICES

F. E. Schifferli,

Fredonia, N. Y.

HARDY PERENNIAL PLANTS

Phlox, Iris, Delphiniums, Shasta Daisies and many other perennials. Send us your want list for prices or ask us for wholesale price-list.

WILLIAM TOOLE & SON,
Hardy Plant & Pansy Farm,

Baraboo

Wisconsin

EVERGREENS

SEEDLINGS
TRANSPLANTS

Large stock—Reasonable prices. If you didn't receive our Trade List, ask for it.

EVERGREEN NURSERY CO.

Evergreen Specialists

Sturgeon Bay, Wis.

U. S. Trees grown by U.S.

Small Evergreen Trees for Forest-planting and lining-out

WE RAISE OUR OWN TREES FROM SEED

Write for our price list.

Keene Forestry Association, KEENE
N. H.

PRINTING

Catalogues

Stationery

Business Forms

Specialists in Nursery Printing

Ask for Prices.

We are the printers of this Magazine

The Robinson

Publishing Co.

Hatboro, Pa.



.. STRAWBERRY PLANTS ..

Summer and Fall bearing varieties, shipped to you or direct to your customer under your tag.

Plants and service that pleases both you and your trade.

Let us quote you

V. R. ALLEN,

59 Lane Avenue

Seaford, Del.

—SHADE TREES—

We have a fine lot of Ash, Elm, Box Elder, Maple, Catalpa and HACKBERRY. Let us quote you prices on your wants. Can furnish them in carload lots.

GURNEY SEED & NURSERY COMPANY,
Yankton, South Dakota.

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.

147 Summer St.

Boston, Mass.

CALL'S NURSEREIS

PERRY,

OHIO

We have the following stock in surplus:

10,000 Peach 9-16 inches and up
5,000 Peach, 7-16 to 9-16 inches
5,000 Houghton Gooseberries, 3 years
5,000 Barberry thunbergi, 18 to 24 inches and up
5,000 Hydrangea paniculata grandiflora, 2 to 3 feet.
500 Hydrangea paniculata grandiflora, Tree form
50,000 California Privet, 18 to 24 inches
American Elm, European Sycamore and Norway Maple in all sizes and quantities.

The above stock is as good as can be grown. Graded to the highest standard and will be priced right to any Nurseryman interested.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials.

Send us your want list.

Inspect our stock.

The

Established 1841

Gardeners' Chronicle

is the Leading Horticultural Journal in the World

SUBSCRIPTION IN U.S.A., \$4.20
YEARLY POST FREE

Specimen Copy and Catalogue of Horticultural Books post free on application to the publisher----

The Publishers, 41 Wellington St.
Covent Garden, LONDON, W.C.

CHAMPION NURSERIES, Perry, Ohio

Offer the Following Stock

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6. to 8 ft., 8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4 ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet, California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio

SCARFF'S NURSERY



Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries
Raspberries
Blackberries
Dewberries
Berberry

Currants
Gooseberries
Grape Vines
Privet
Spirea

Rhubarb
Asparagus
Horseradish
Hardwood Cuttings
Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE OHIO

We sell to THE TRADE only, and make a specialty of

OREGON CHAMPION GOOSEBERRY PERFECTION CURRANT CLEAN COAST GROWN SEEDLINGS

We also have growing for fall delivery a large assortment of general nursery stock, including Fruit, Shade, and Ornamental trees, Roses, Etc.

Head Quarters for Nursery Supplies.

Correspondence invited.

Portland Wholesale Nursery Co.

122½ Grand Avenue, Portland, Oregon

A Large Stock of Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES and SHRUBS. All stock clean and thrifty, the best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1919

Apple, 2 year, fine Ben Davis, Black Ben Davis, Gano, Delicious, Lowry, Rome Beauty; Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; Evergreens—Norway and Hemlock Spruce, Deodar Cedars, Irish Junipers, California Privet, 2, 3, and 4 year; Sugar Maple Seedlings, six inches to ten feet.

Write us for prices.

W. FROMOW & SONS

Rhododendrons, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES

Surrey, - - - England

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and

PRINTED IN ANY MANNER that may be called for

Prices as low as First-Class Work and Unequalled Promptness in

Delivery will justify.

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

THE WAR IS OVER

Nursery Business Will Boom

Are You Prepared?

Plant largely of

ORNAMENTAL TREES, SHRUBS and VINES

Our price list of this stock for lining out in nursery rows is ready now. Write for copy.

THOMAS B. MEEHAN CO.

Wholesale Nurserymen

DRESHER,

PENNA.

Subscribers to "Nurserymen's Fund for Market Development."

CAROLINA PEACH SEED

Prospects up to now are good for a crop this season. Of course the crop can be damaged from now on. If you want to secure your supply of this year's crop, we suggest that you send in order, price to be determined later, after we can see how everything is. They will not cost you any more this way, and then you will be sure of your supply.

In the meantime, if you want 1918 crop, they can be shipped promptly; price \$3 per bushel of 50 pounds, sacked, f. o. b. cars shipping point.

J. Van LINDLEY NURSERY CO.
Pomona, N. C.

Subscribers to Market Development Fund.



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the **Nursery, Florist, Seed Trade and Allied Industries**. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address

The Florists' Exchange, P. O. Box 100, Times Square Sta.

When writing to Advertisers please mention the National Nurseryman.

SOME GOOD THINGS FOR IMMEDIATE SHIPMENT

CALIFORNIA PRIVET

5,000 6 to 12 in.
10,000 12 to 18 in.
10,000 18 to 24 in.
10,000 2 to 3 ft.
5,000 3 to 4 ft.
2,000 4 to 5 ft.

BOXWOOD (Dwarf)

100 12 in.
100 18 in.

BARBERRY THUNBERGII

5,000 6 to 12 in.
10,000 12 to 18 in.
10,000 18 to 24 in.
10,000 2 to 2½ ft.
5,000 2½ to 3½ ft.

CALIFORNIA PRIVET, (Specimen)

2,000 4 ft. high, 3 ft. broad

BOXWOOD

400 18 in.
400 24 in.
400 30 in.
50 36 in.

PEONIES

Select one-year plants, three to five eyes.

1,000 Duchesse de Nemours (White)
1,000 Edulis Superba (Pink)
2,000 Felix Crousse (Red)
1,000 Festiva Maxima, (White)
1,000 Madame de Verneville (White)
250 Baroness Schroeder .. (White)
500 Unnamed (Red)
250 Unnamed (Pink)

FLOWERING SHRUBS

BUTTERFLY BUSH

200 3 to 4 ft.

CORAL BERRY

750 2 to 3 ft.

DOGWOOD, RED TWIG

100 2 to 3 ft.
100 3 to 4 ft.

DEUTZIA, CRENATA

750 3 to 4 ft.

DEUTZIA,

PRIDE OF ROCHESTER

2,000 3 to 4 ft.

ELDER, FERN LEAF

200 3 to 4 ft.
200 4 to 5 ft.

GOLDEN BELL, DARK GREEN

500 3 to 4 ft.

INDIGO, FALSE

50 4 to 5 ft.

MOCK ORANGE, GOLDEN

100 3 to 4 ft.

MOCK ORANGE, GORDONIANUS

250 2 to 3 ft.
250 3 to 4 ft.

MOCK ORANGE, GOLDEN DWARF

100 12 to 18 in.

ROSE OF SHARON, DOUBLE WHITE

50 2 to 3 ft.
50 3 to 4 ft.

ROSE OF SHARON, DOUBLE PINK

100 3 to 4 ft.
100 4 to 5 ft.

ROSE OF SHARON, DOUBLE RED

100 3 to 4 ft.

SIBERIAN PEA SHRUB

100 3 to 4 ft.

SCOTCH BROOM

100 2 to 3 ft.

SWEET SCENTED SHRUB

200 2 ft.

SPIREA, VAN HOUTTII

750 2 to 3 ft.
500 3 to 4 ft.

SPIREA, ANTHONY WATERER

200 12 to 18 in.
300 18 to 24 in.

WEIGELA, ROSEA

200 2 to 3 ft.
100 3 to 4 ft.

WEIGELA, AMABILIS

100 2 to 3 ft.

WEIGELA, AMABILIS ALBA

200 2 to 3 ft.
300 3 to 4 ft.

AMERICAN ARBORVITAE, (Thuya Occidentalis)

100 2½ to 3 ft.
200 3 to 3½ ft.
200 3½ to 4 ft.
500 4 to 4½ ft.
500 4½ to 5 ft.
500 5 to 5½ ft.
200 5½ to 6 ft.
100 6 to 7 ft.
100 7 to 8 ft.

KOSTER'S BLUE SPRUCE (Specimen Plants)

50 1½ to 2 ft.
50 2 to 2½ ft.
50 2½ to 3 ft.
50 3 to 3½ ft.
50 3½ to 4 ft.
50 4 to 4½ ft.
50 4½ to 5 ft.
50 5 to 5½ ft.
50 5½ to 6 ft.
50 6 to 7 ft.
50 7 to 8 ft.
50 8 to 10 ft.

MAPLE, NORWAY

5,000 7 to 8 ft., 1 in.
10,000 8 to 10 ft., 1¼ to 1½ in.
10,000 10 to 12 ft., 1½ to 1¾ in.
10,000 12 to 14 ft., 1¾ to 2 in.
10,000 14 to 16 ft., 2 to 2½ in.
10,000 2½ to 3 in.
5,000 3 to 3½ in.
2,000 3½ to 4 in.
400 4 in.

HEMLOCK, CANADIAN

100 1 to 1½ ft.
200 1½ to 2 ft.
200 2 to 2½ ft.
500 2½ to 3 ft.
500 3 to 3½ ft.
500 3½ to 4 ft.
200 4 to 4½ ft.
100 4½ to 5 ft.
100 5 to 6 ft.

SPRUCE, NORWAY

500 2½ to 3 ft.
500 3 to 3½ ft.
1,000 3½ to 4 ft.
1,000 4 to 4½ ft.
1,000 4½ to 5 ft.
1,000 5 to 6 ft.
500 6 ft.
300 7 ft.
100 8 ft.
100 10 ft.

HARRISONS' NURSERIES,
Berlin, J. G. Harrison & Sons Maryland

Subscribers to "Nurserymen's Fund for Market Development."

Press of Robinson Publishing Company, Hatboro, Penna.



THE NATIONAL NURSERYMAN



MAY 1919

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

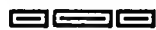
Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large assortment of high quality Nursery
Stock for the Wholesale Trade.
Fruit Trees, Small Fruits, Ornamental Trees,
Shrubs, Roses, and Vines.

A FINE LOT OF

Elm, American White, all sizes

Wanted — Hansen Hybrid Plums and Compass

Ask for Trade Lists. Write us about your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry — Plants —

*We can supply you fresh
dug every day. Healthy
true-to-name, well rooted
at attractive prices.*

Address

The W. F. Allen Company

Salisbury, Maryland

To the Trade:

*Are you watching our
Bulletins?*

*They are money-makers
for you.*



C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

Seven Safe Rules for Satisfaction

Rule No. 1

Buy J. & P. Preferred Stock

Not necessary to know the
other six

Jackson & Perkins Company
Newark, - New York

The
Preferred
Stock

The
Preferred
Stock

RAFFIA

By the time this ad. appears
we will be able to ship the
same old dependable brands

Red Star Brand
XX Superior Brand
A. A. West Coast Brand

The embargo still continues,
and later on we may have time
to tell you how we got it.

Write for prices.

McHUTCHISON & CO., The Import
House

95 Chambers St.

New York

J. H. Skinner & Co.

Topeka, - Kansas



Japan Pear Seedlings.

Russian Apricot Seedlings.

Forest Tree Seedlings—Catalpa, Maple,
and Locust.

Fruit Trees—Apple, Cherry, Kieffer Pear,
Peach and Plum.

Rhubarb, Divided Roots, True Myatt's
Linneaus.

Grapes

Shade Trees

Flowering Shrubs

Paeonias

Hill's Evergreens

We are headquarters for Everything in the Evergreen line,
and with few exceptions have our usual full supply, but
some things are scarce and getting scarcer every day.
Owing to lack of imports, demand is brisk, and shrewd
Nurserymen are covering their requirements early.

Nurserymen—Send us your list of wants in young Ever-
greens for lining out. Also Deciduous Trees, Shrubs and
Vines. Our Propagation Department is one of the largest
and most complete in America, and feel sure we can save
you money and give complete satisfaction.

Dealers—Let us take care of your wants in Windbreak,
Hedge and Ornamental Evergreens. Send in your list for
pricing now, while assortment is complete.



The D. HILL Nursery Co., Inc.

Evergreen Specialists

LARGEST GROWERS IN AMERICA

Box 401

Dundee, Ill.

When writing to Advertisers please mention the National Nurseryman.

PAINESVILLE NURSERIES



AMERICAN ELMS

THIS IS THE PLACE

To look first,—and save time for

FRUIT TREES

NUT TREES

SMALL FRUITS

ORNAMENTAL STOCK:

DECIDUOUS TREES,

EVERGREEN TREES,

SHRUBS

FIELD GROWN ROSES

Hardy Perennial Plants

Greenhouse Plants and Bulbs

Definite Want Lists promptly quoted.

SEEDS

THE STORRS & HARRISON CO.

NURSERYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

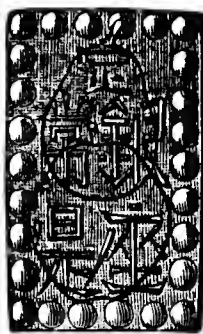
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

73 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

For Spring 1919

Our largest surplus consists of the following:

Montmorency, Richmond & Dye House $\frac{3}{4}$ in. up

Apple - - - - 3 and 4 years

Ben Davis Dr. Matthews

Benoni Gano

Banana McIntosh

Canada Red Maiden Blush

Carson, (red, earlier than Yell. Trans.) Stark

Ragans Red, (Black Ben Davis) Wagoner

Plums - - - 11-16 and 5-8 in.

Lombard, Bradshaw, Shropshire.

Norway Maple, (20,000) - - up to 2 in.

These maples are straight and fine stock.

American Elm, (25,000) - - up to 2 $\frac{1}{2}$ in.

Spirea Van Houtti, 3 to 4, 4 to 5, 5 to 6 ft. bushy

Also a general assortment of small fruits,
shade and ornamental trees and plants.

C. M. Hobbs & Sons
Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

BAY TREES

Standards, Pyramids
Short Stems, Bush Shape

These will probably be
the last to come from Belgium.

Write for list of sizes and
F. O. B. New York quotations.

McHUTCHISON & CO. The Import House

95 Chambers St.

New York

Ornamental Nursery Stock

TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS PLANTS

Large assortment. Long list of varieties and sizes
Get our New Trade Catalogue,—ready now.

Fall price list out of date.

Thomas B. Meehan Co.

WHOLESALE NURSEYMEN,

DRESHER

PA.

-- Peach Trees --

Good assortment in all grades. Send list of wants. Other Fruit Trees, Shade Trees, Evergreens, Shrubbery and Privet in good supply.

THE RAKESTRAW-PYLE CO.

Willowdale Nurseries

Kennett Square, Pa.

CHAMPION NURSERIES, Perry, Ohio

Offer the Following Stock

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6 to 8 ft., 8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4 ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet, California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio



Rhododendron carolinianum

New American Species

CLEAR PINK. ABSOLUTELY HARDY

Send for prices and full description, and Catalogs of the only large collection of Hardy Native Plants.

Highlands Nursery
Boxford Nursery

HARLAN P. KELSEY, Owner
Salem, Massachusetts

IBOLIUM THE NEW HYBRID

To be sent out in Fall 1919.
THE ELM CITY NURSERY CO.

HARDY PRIVET

More about it later.
Woodmont Nurseries, Inc.

(L. Ibota x Ovalifolium)

Introducers of BOX-BARBERRY
NEW HAVEN, CONN.

When writing to Advertisers please mention the National Nurseryman.

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

We are pleased to offer for Spring or Fall:

CHERRY, 2 year X X 1 inch up, also $\frac{3}{4}$, $\frac{5}{8}$ and lighter grades.

CHERRY, One year $1\frac{1}{16}$ up, $\frac{5}{8}$ & $\frac{1}{2}$ to $\frac{5}{8}$
Our Blocks of Cherry are largest to be found in U. S.
We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

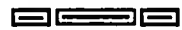
Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment.
Grafted Hardy Northern Pecans.

Car Lots a specialty, also fair assortment of Ornamentals.

Subscribers to "Nurserymen's Fund for Market Development."

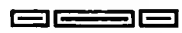
1918 Peach Seed



We offer a surplus of
100 bushels of North Carolina Peach Pits
Crop 1918

At \$3.00 per 50 pounds

F. O. B. here



H. F. Hillenmeyer & Son
LEXINGTON, KY.

FAIRFIELD NURSERIES FRUIT AND SEED FARMS

I have sold all the stock I will have this Spring, but this Summer I will be ready to book orders for Fall, 1919 and Spring 1920 delivery.

The war is over and good times are ahead. No more guns or ammunition will be needed, but you will want more of my Grape Vines, Scarlet and Crimson clover and Cow-Peas than ever before.

Keep me in mind.

CHAS. M. PETERS

P. O. Address Salisbury, Wicomico County, Maryland.
Long Distance 'Phone and telegraph, Salisbury, Maryland.

THE WESTMINSTER NURSERY J. E. Stoner, Prop.

WESTMINSTER - - MARYLAND

Offers for Spring 1919

250,000 Cal. Privets in grades 2 and 3 yr.

500,000 Asparagus, 2 and 3 yr., Asst.

Barberry Thun., 18-24 in. and 2-3 ft.

Lombardy Poplars in grades 6 to 16 ft.

Oriental Planes in grades 6 to 12 ft.

Tulip Poplars, 6-8 ft.

Horse Chestnuts in grades 7 to 12 ft.

Catalpa Spec in grades 8 to 12 ft.

Butter Nuts 4 to 8 ft., in grades.

Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft.,
Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft.
and 4-5 ft., Hydrangeas P. G. 18-24 in. Write for Prices.

We Have A Question To Ask You

It is this: Do you use Grootendorst's Dutch Bulbs? If you do, we'd like you to tell other nurserymen about them—tell all you know. But if you don't, we'd like to know "why not?" They are profitable and easy to handle.

**Grootendorst's Tulips, Crocuses
Hyacinths and Narcissi**

are the best quality obtainable; we are sure that they will give satisfaction to you and your trade. If you sell good bulbs it means a growing business—one that can be depended upon each year. We urge you strongly to order now while a complete selection may be obtained. Later it may be difficult, if not impossible, to get what you want.

F. J. Grootendorst & Sons
2 Stone St., New York City

We are now ready to quote lowest prices on FRUIT, SHADE AND ORNAMENTAL TREES, SHRUBS, EVERGREENS, VINES and HERBACEOUS PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

Columbia Rose Plants

Good Ones

From two and one-half inch pots



A. M. KINSMAN, INC.

Austin, - - Minn.

For FUMIGATION With HYDROCYANIC ACID GAS "CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

PEXTO TOOLS

FOR USE ABOUT THE HOME AND FARM
FOR THE MECHANIC IN EVERY TRADE



Sell MORE Nursery Stock This Book and Plan Will Help You

Take care of your old customers but *keep adding new ones*. It's the only way to show a healthy increase in business and profits each year.

The Little Pruning Book offers the solution. It is an authoritative guide to correct pruning. Illustrates and explains how, when, and where, to prune for bigger and better fruit, flowers and plant life in general. Familiarize more customers with the fundamentals underlying the art of pruning and greater interest and more purchases will result.

The Plan Behind the Book



Our selling plan increases *your* profits by placing *The Little Pruning Book* in the hands of your customers through *you*. Your sales of nursery stock will increase as a matter of course.

Sending for a free volume does not obligate you in any way. It will bring you details of our cooperative plan of distributing this educational work, through nurseries. (The Little Pruning Book sells in book stores at 50 cents).

THE PECK, STOW & WILCOX COMPANY

Mfrs. Mechanics' Hand Tools, Tinsmiths' and Sheet Metal Workers' Tools and Machines, Builders' and General Hardware.

Southington, Conn.

Cleveland, Ohio

Address correspondence to 2189 W. Third St., Cleveland, Ohio

100% American for 100 years. Founded in 1819



When writing to Advertisers please mention the National Nurseryman.

MAY—

Plant Evergreens This Month



The sales-sizes, for delivery to your customers, can be safely planted all through May and June and even later.



Smaller sizes, for nursery planting, can be lined out after the shipping is all out of the way and your deciduous stuff planted.

We have all sizes in a good list that includes the best of the Abies and Piceas, Biotas and Thuyas, Junipers, Pines, Retinisporas, Taxus and Tsugas.

Write us if interested in Conifers and tell us what you want, or just ask for a list of what we offer for shipment now.

May first

PRINCETON NURSERIES



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE



THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...



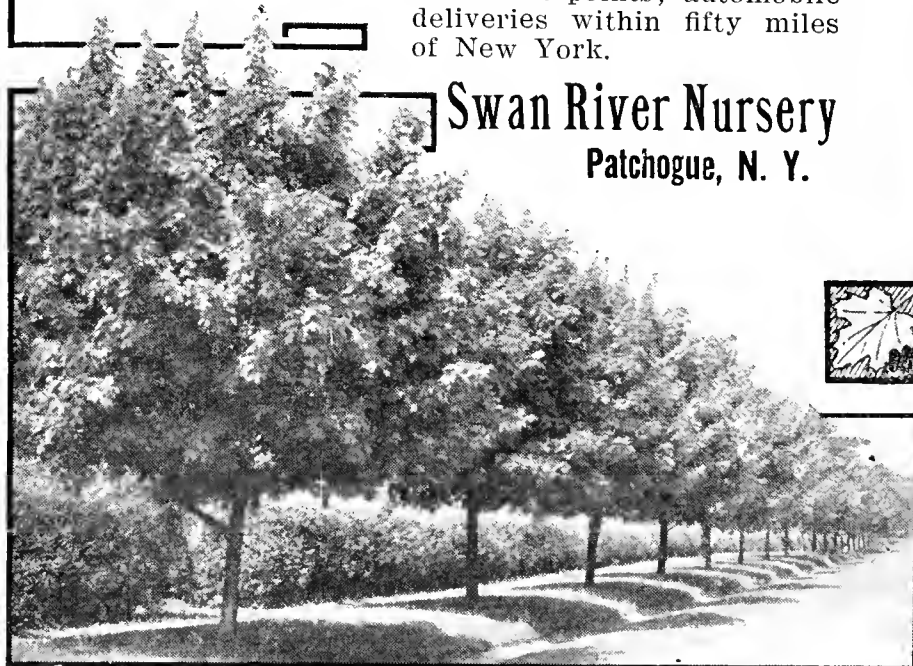
Regular Growth

is one of the best features of Norway Maples. Planted along avenues or arranged to create certain effects, they will be just as regular and symmetrical in ten years as when they were planted—if they are good trees.

**Our Norway Maples
are good trees**

Timely transplanting has developed an excellent root system. They caliper 1 to 3½ inches. They are straight and sturdy. We are able to ship in carlots to distant points; automobile deliveries within fifty miles of New York.

**Swan River Nursery
Patchogue, N. Y.**



When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSEYSTOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVII.

HATBORO, PENNA. MAY, 1919

No. 5

AVENUE TREES



The Oriental Plane as an Avenue Tree

Avenue Trees

TO get a good avenue of trees the one essential is uniformity, and for each tree as it attains maturity, to show its natural characteristics, in other words, for each individual to be a well grown specimen. This is rarely accomplished, as accidents will happen to the individuals, making gaps, and if the avenue is of any length there are often varying soil conditions and exposures which effect the growth.

There are to be seen, however, very fine avenues in various parts of the country, that are almost perfect and wonderfully effective. Nothing is quite as imposing as a long avenue of well grown trees lining the approach to a country seat, or forming vistas giving certain outlooks.

To insure uniformity it is almost necessary to select one of the vigorous and easily transplanted kinds. The Silver Maple makes a fine avenue tree until it begins to attain age, but unfortunately it is a soft wooded tree, easily broken by the storms and one rarely sees finely developed avenues of them that have not been either marred by ice storms, or have suffered from other causes.

The Norway Maple is such a compact, round headed tree, but it is not at all imposing even when full grown. It also has its objections on account of the dense shade and surface rooting qualities, which usually leave an unpleasing condition underneath.

The Oriental Plane, Button Ball as it is called, is perhaps one of the fastest and most effective of the avenue trees. It grows to very noble proportions, and if well spaced and properly cared for, it is a tree that seldom gives very much trouble.

The great fault in planting avenues of trees is that they are usually planted too close, the planters being too impatient for results. A well grown tree of Oriental Plane requires plenty of room for normal development. 50 ft. apart should really be a minimum. Very often when planted 25 or 30 feet apart they soon interfere with each other and become crowded. The accompanying illustration shows these trees planted possibly 25 years ago, and which now form a complete shaded arch over the road, used in this manner to form an allee.

This method of planting them should not be confused with the avenue effect where each plant is allowed plenty of room for full development. The trees shown in the picture are 30 feet apart and have been properly pruned and cared for, making a very effective shaded roadway. Had these trees been planted much wider apart along each side of a drive, so as to allow each individual tree room for full development, the effect would have been much finer, and the life of the trees very much longer.

The Oaks make splendid avenue trees. They are not popular, however, because they are a little bit difficult to start, and a bit slow to give good effect, but they are worth while waiting for. Either Scarlet, Pin or Red Oaks are all good subjects, and if too many trees are not used in the beginning, and they are all well planted so as to get an even start, they really do become very effective. Another tree that would make a fine avenue effect would be the Sweet Gum. The writer has known several attempts to establish it in this manner, but due to the dif-

ficulty in transplanting, it has not been very successful. Tulip Poplar is also difficult to establish, but one can hardly imagine anything finer than a good avenue of stately Tulip Poplars.

Those who have seen the Horse Chestnuts in Bushy Park near Hampton Court, England, when in flower, will appreciate the wonderful possibilities of proper planting and care. These were planted before 1707 and have been intelligently cared for since. What we really need in this country when planting avenues is to plant them for the future rather than the present, which is perhaps the great fault in the majority of our planting.

FIGURES ON THE NURSERY BUSINESS IN TEXAS

Figures compiled by Louis J. Tackett, Chief of the Division of Orchard and Nursery Inspection of the Texas State Department of Agriculture, show the following:

Number of acres devoted to nursery stock in 1918—2567. Total number fruit trees grown in nurseries—5,291,554; shade trees 1,274,401; berry plants 3,747,450; shrubs 2,138,378; grape vines 560,731; flowering vines 102,933; nut trees 668,891. Total value of nursery stock grown in 1918 was \$1,138,870.

The nursery production was at its low ebb in 1918 hence the figures shown above do not represent the normal production of nursery stock in the state. For several years the output of nursery stock has been on the decline, but already there is a considerable increase in preparation for the growing of stock over last year, hence it may be expected that there will be a greatly increased output during the next few years.

SIZE OF CATALOGUES

April 2, 1919.

It may interest you to have the recent decision of A. M. Dockery, 3rd Assistant Postmaster General, written to the writer.

The circular letter of Post Office Dept. of June 3, 1918, suggesting the restriction of the size of envelopes to 4x9 inches is not an order, but simply a suggestion, and Mr. Dockery uses these words:

"Whenever it is practicable to prepare matter so that it can be enclosed in an envelope not exceeding 4x9 inches, this should be done."

As it is quite impossible for the seedsmen or nurserymen to limit the size of their catalogs to the dimensions above indicated, relief is felt that this circular of June 3, 1918, is not an order but merely a suggestion.

It is understood that some local postmasters are holding this circular of June 3, 1918, to be an order, and if any difficulty arises, it is suggested that the local postmaster secure an opinion from Mr. Dockery.

Yours truly,

CURTIS NYE SMITH.

Result of Meeting in Reference to Quarantine No. 37

Department of Agriculture, Washington,
April 1, 1919.

Mr. Thomas B. Meehan,
Acting Chairman, Legislative Committee,
American Association of Nurserymen,
Dresher, Pennsylvania.

Dear Sir:

As a result of the meeting in reference to Plant Quarantine 37, which was held in my office on March 1, 1919, and which was attended by representatives of your Association and also of the New York Florists' Club Protesting Committee and of the Society of American Florists, this whole subject has been thoroughly reconsidered. This was believed to be desirable, in order to determine whether the suggestions and objections in reference to the quarantine order, made at that meeting and at other times by certain individuals and associations, were such as to warrant any essential modification thereof.

It has been definitely known, for many years, that plant diseases and insect pests are continually being introduced in this country through the importation of nursery stock and other plants and plant products and that the results have, in many instances, been disastrous over wide sections of the country. The so-called Plant Quarantine Act of August 20, 1912 (37 U. S. Stats., at large, page 315), represents the official recognition of this fact by Congress. Under the authority of this Act, the Department has, from time to time, promulgated a number of quarantines restricting or prohibiting the importation of certain plants and plant products found to have been the cause of disease and infestation. As a real remedy, this method has been found, in many cases, to be entirely inadequate, because it is based, largely, on the principle of providing against dangers after they have been discovered, when it was often too late, owing to the fact that the damage already had been done and the infestation already had begun to spread. Such a method is in the nature of an attempt to cure rather than to prevent. On the other hand, attempts at prevention, instead of cure, have been made from time to time by provisions for inspection, either in foreign countries or, upon importation, by Federal officials or State authorities. But the method of inspection; as well as that of cure, has been found to be entirely inadequate in many cases.

Largely because of the havoc which has been wrought by such importations and also as the result of investigations carried on by the Department and the definite scientific information received from reliable sources, it has been felt that something more comprehensive was needed than either a piecemeal quarantine, which begins the application of a remedy after the particular injury has begun to operate, or a system of inspection by which, in many cases, no matter how conscientious the inspectors may be, it is impossible to discover the harmful disease or pest.

In illustration of the growing sentiment in the country for an improvement over prevailing methods of preventing the introduction of plant diseases through importations, reference may be made to the resolution passed January 1, 1918, by the Section of Horticultural Inspection of the American Association of Economic Entomologists, at its meeting in Pittsburgh. At that time recommendations were made (1) for the prohibition of the importation of all nursery stock as defined in the Quarantine Act of August 20, 1912, except under Federal quarantine regulations; (2) immediate, absolute embargo against nursery stock with soil around the roots; (3) ultimate prohibition of all kinds of nursery stock, after allowing suitable time for trade adjustment.

Believing that the time had come to take definite steps along the lines suggested, the Bureau of Plant Industry was asked for information (1) as to the advisability of excluding from importation all ornamentals and other plants with soil about the roots; (2) as to the exclusion of all kinds of nursery stock from Asia, Africa, and other little known localities. In response to this request, the Bureau submitted a report on February 26, 1918, in which it was stated, among other things, that, in order to protect the country against dangerous plant pests and diseases, the time seemed to be at hand "for the inauguration of a policy that would gradually result in the exclusion of all foreign nursery and florist stock."

Thereafter, on March 28, 1918, notice of a public hearing to be held May 28, 1918, was sent to all nurserymen on the mailing list of the Federal Horticultural Board and was published in the horticultural and florist trade papers, in order that suggestions of a practical nature might be made by private individuals or associations, whose business would be affected by a more comprehensive general quarantine, and by State officials or bodies interested in the protection which such a quarantine would afford.

The hearing, for which notice was thus given, was held on the date specified and was largely attended by State officials and private individuals. The hearing, however, was very one-sided, for the opinions expressed were almost unanimous as to the wisdom of the proposed quarantine for the exclusion of diseased and insect bearing plants and plant products. Furthermore, many speakers favored a much more complete exclusion than that suggested in the tentative recommendations set forth in the notice of hearing. The letters received from nurserymen and State and other officials, who were unable to attend the hearing, were likewise practically unanimous with respect to the need of a much more comprehensive and general restriction upon plant importations than had ever been put in force.

Final action was not taken by the Department directly after this hearing; instead, the whole question was again taken under advisement and again thoroughly investigated for a period of three months, during which time

many nurseries and florists establishments in different parts of the country were visited, for the purpose of getting their point of view. Further consultation also was had with the different specialists in the employ of the Government. The result of this further investigation was thereupon embodied in a proposed general plant quarantine order, which is practically identical with quarantine 37, as finally issued. This form of proposed quarantine was, on August 29, 1918, sent to the trade journals, to the nursery and other societies represented at the hearing of May 28, 1918, to individuals who had manifested their interest by speaking at the hearing, and to others, with the request that they give it careful consideration, in view of a possible conference later for the purpose of discussing the various regulations contained therein. Such a conference was called for October 18, 1918, through a circular letter sent out about two weeks earlier. Another notice was sent out eight days before the meeting, suggesting that, because of the prevalence of influenza in Washington at that time, those who intended to present arguments or facts with reference to the proposed quarantine at the meeting should do so by mail, unless they had special reasons for attending the conference in person.

Although the attendance at this conference in October, 1918, was not so large as at that of May 28, 1918, there was present a considerable number of prominent florists and ornamental horticulturists, as well as representatives of trade associations or State officials interested in the subject to be discussed. A very full presentation was made, chiefly by Mr. Eisele, representing the Henry A. Dreer nurseries, of the dissenting view of florists and horticulturists, who wished to continue the importation of the class of plants and plant products which would be prohibited under the proposed quarantine.

It was promised, at this conference, that the facts presented and suggestions made would be submitted to the experts of the Department and given careful consideration. This course of action was followed with the result that the Department was still convinced that no change in the proposed regulations was warranted in view of the real danger which threatened the forests, farms, orchards, and gardens of the country through the introduction of pests and diseases by plant importation.

Various objections to the quarantine order under consideration have been brought to the attention of the Department in one way or another, both before and after the quarantine was officially issued and I wish to take up the more important of these, so that the Department's attitude in reference thereto may be made more clear.

FIRST: Certain objections have been made to the procedure preliminary to the issuance of the quarantine, such as those pointed out specifically in an "Appeal" filed by the American Association of Nurserymen, on February 14, 1919, in which it is stated that the notice sent out for the hearing of May 28, 1918, "misled" the trade as to the purpose and scope of the proposed quarantine and that, in its final form, the quarantine was in the nature of a "surprise."

It is true that the notice sent out for the hearing of May 28, 1918, made special reference to a limited form of restriction, namely, the exclusion of balled plants, etc., and importations from countries more or less un-

known, but it was also specifically stated therein (1) that the Department was considering the advisability of placing restrictions and prohibitions on "nursery stock and other plants and seeds from all foreign countries" necessary to prevent the introduction of any tree, plant, or fruit disease, or any injurious insects; (2) that the hearing was for the purpose of considering "such" restrictions or prohibitions; (3) that the particular subjects mentioned were to be given "special consideration" but that this did not limit the scope of the discussions; and (4) that the presentation and discussion of these particular subjects should not be taken as limiting the ultimate action of the Department. Moreover, an examination of the discussion as carried on at the hearing of May 28, 1918, makes it very clear that those who attended and spoke fully recognized that the discussion was not limited to these particular topics, since practically the whole field of plant and plant product restriction was embraced therein. This was also true of the letters received from those who could not attend the meeting. If these statements, so plainly a part of the notice of hearing, were overlooked by any interested parties, they might, of course, say that they failed to appreciate the scope of the proposed hearing but they certainly can not properly say that they were "misled."

Neither does there seem to be any real ground for the claim of "surprise" as to the final form of Quarantine 37. As shown above, no official quarantine regulations were issued immediately after the hearing of May 28, 1918, or even after three months further investigation by the Bureau of Plant Industry. Instead of issuing the quarantine at such time, which would have been entirely justified, a proposed form thereof was prepared and sent out in August, 1918, for consideration by all parties interested and a conference for the discussion of the terms was called for October 18. As this proposed form was almost identical with the quarantine as actually promulgated on November 18, 1918, one month after the conference was held and nearly six months after the hearing of May 28, 1918, at which practically the whole subject was discussed, it is difficult to see how there can be any room for the element of "surprise" with respect to the action taken.

SECOND: Objection has been made to the legality of the quarantine order, such as that found in the "Appeal" of the American Association of Nurserymen, wherein the statement is made that Plant Quarantine 37 is of "doubtful legality." This point was formally passed upon by the Solicitor of the Department on November 9, 1918.

It is proper to point out that, in the discussion of this point as it appears in the "Appeal," it is apparently assumed that the Department was necessarily bound to act only on such evidence as was presented at the hearing of May 28 or on that contained in the Department's publication entitled "A Manual of Dangerous Insects &c." and, by quoting excerpts from such evidence, alleged to be indefinite or not in point, it is argued that the action subsequently taken was unwarranted. But this entire assumption ignores the many years of investigation carried on by, or in cooperation with, the Department, or by individual scientists, with reference to plant diseases and insect pests resulting from importations, the special investigation made during the summer of 1918 with re-

spect to suggestions made at the hearing of May 28, 1918, and the evidence presented at or in connection with the hearing held October 18, 1918.

THIRD: Objections involving amendments to, or substitutes for, portions of the quarantine order.

(a) That, instead of naming the particular bulbs which, when free of earth, would be allowed under prescribed regulations provision should be made for the entrance of all bulbs, when freed of earth, except such as were particularly named for exclusion.

It is easy to see that the effect of such a form of statement would be precisely the same as that now embodied in the quarantine order as issued, while it would require a very much longer statement to specify, with any kind of completeness, the entire list of those that should be excluded.

(b) That bulbs do not necessarily have to be wrapped in living earth, that they can be wrapped in earth which has been specially prepared and sterilized, and that bulbs so prepared for import should not be excluded.

It was promised that this matter would be further considered and such further consideration has resulted in the issuance, on February 12, 1919, of an amendment to Reg. 3 of the quarantine, which reads as follows:

"PROVIDED: That the requirement as to freedom from sand, soil, or earth shall not apply to sand, soil, or earth used for packing the articles enumerated in Item No. 1 of this regulation when such sand, soil, or earth has been previously sterilized in accordance with methods prescribed by the Federal Horticultural Board under the supervision of a duly authorized inspector of the country of origin. Such sterilization shall be certified to by the duly authorized inspector of the country of origin."

(c) That provision for more thorough inspection should have been made instead of a quarantine excluding plants grown in such countries as Holland, Belgium, England, France, and Ireland.

As already stated, there are many instances of diseases and pests which are not discernible by any practical method of inspection yet known. This seems to be abundantly established by the testimony of technical men and scientists based upon experience and thorough investigation. It was voiced at the hearing of May 28, 1918, by Mr. J. G. Sanders, Secretary of the National Horticultural Inspectors' Association. It was his opinion that, in certain well known cases, inspectors, even when they do their best, are "absolutely helpless" in surely preventing the introduction of pests and disease.

It is acknowledged that Holland has one of the best, if not actually the best, of the inspection systems of the foreign countries from which plants are imported and yet, since the enactment of the Plant Quarantine Act in 1912, the Department has incontestable proof of more than 148 species of injurious insects found in nursery stock imported from Holland and many of these were entirely new, so far as this country is concerned, thus bringing with them the possibility of new dangers to forest, farm, and garden.

It is well established by the testimony of investigators, in and out of the Department, that the chestnut blight, which came to us from the Orient, the white pine blister rust and the poplar canker, which came to us from

Europe, can not be discovered even by the most expert plant pathologist, in certain stages of these diseases, because, at such times, they are absolutely invisible from the outside.

The inadequacy of inspection, therefore, as a sure preventive of the introduction of plant pests and plant diseases is apparently not open to serious question.

(d) That, instead of the drastic form of exclusion embodied in Plant Quarantine 37, individual nurserymen be permitted to establish a portion of their nurseries as quarantine stations, under federal supervision.

It is apparent, however, that it would be decidedly unwise and dangerous to place these stations all over the country, and that, merely from a selfish point of view, no nurseryman could afford to have such an experiment carried on in his nursery. Diseases and pests would, of course, come in, since no kind of inspection can absolutely keep them out and since, indeed, that would be the purpose of having such a quarantine station, namely to receive plants with their recognized diseases and there stop them and eradicate them. In a short time, some dangerous infestation would surely be found which would make it necessary for the federal inspector to close the whole nursery, with the result that all the business of that nursery would absolutely cease, at least until the infestation was eradicated.

FOURTH: Objections to particular features of the quarantine order.

(a) That there is no reasonable ground for excluding finished rose plants when the quarantine allows the importation of rose stocks for propagation.

This distinction is based on the fact that, while there is danger in the importation of either class, the danger is not equal in both cases. Rose stocks are brought into the country by nurserymen and importers in large quantities, they are handled for propagation under supervision and inspection, and they are again handled by experts for distribution. On the other hand, the finished rose plants are older and more developed than the rose stocks and therefore more likely to be infested. They are often brought in by importers who do not have any nurseries, or even a foot of glass, and may be shipped, at once, all over the country to customers who have neither the facilities nor the knowledge for giving them such attention as will prevent the spread of any disease or pest they may be carrying.

It is recognized also that rose stocks must come in if the country is to have anything like an adequate supply of roses. It is believed, in the circumstances, that the injury resulting from the entire exclusion of rose stocks would outweigh the consideration of the smaller risk attendant upon such importations.

(b) That ornamental stocks and seedlings should be allowed to come in if fruit stocks and fruit seedlings are permitted.

As already stated, Plant Quarantine 37 was issued because, and solely because, the Department is convinced that a more comprehensive restriction on plant importation than any of the quarantines now in force is necessary to secure adequate protection to the forests, farms, and orchards of the United States. Complete safety can probably be attained only by absolute exclusion of all plants and plant products, since it is known that no form

of inspection is an infallible preventive. The Department felt, however, that it would not be justified, at this time, in prohibiting the importation of nursery stock which is essential to the floriculture and horticulture of the country, including fruit seedlings and fruit stocks, although it seemed clear, on the other hand, that everything feasible should be done to reduce to a minimum the danger which attends the importation of all nursery stock. In excluding ornamental stocks and seedlings, the Department has, therefore, taken a definite step toward absolute safety, which will materially reduce the risk known to exist, and, at the same time, will not deprive the people of anything which is indispensable.

(e) That it is unreasonable to admit six specified varieties of bulbs and exclude the far greater number of other bulbs, corns, tubers, etc.

In respect to this point, the experience of the Department, through many years, has shown that, with certain classes of bulbs, there is but little danger, if inspection is careful. These comprise the cleaner sort of bulbs that are more easily disinfected, which come in large quantities from a limited number of well known countries which have the best inspection services. All danger is not absent even then, but it is comparatively small, and the quarantine specifies such bulbs and allows them to come in. On the other hand, the excluded bulbs, which are not named, belong to miscellaneous classes, which come from more remote corners of the earth, whose insect dangers are necessarily little known and therefore still more difficult to make even comparatively safe by inspection.

FIFTH: Objections to collateral matters and matters of less importance.

(a) The Department is charged with recommending the order as a tariff measure so as to stimulate the business and enhance the profits of certain domestic nurseries which, in greater or less measure, produce the excluded plants or plants which can be, to some extent, substituted for them. This result may follow in some cases. It is impossible for any fair-minded and disinterested person, however, to trace the action of the Department, step by step, to consult the authorities it has relied on, as it has moved through its promulgation of piecemeal quarantines toward this quarantine, as now framed and issued, without being convinced that the action taken has been the result of nothing but a clear purpose to stop, as far as possible, the entrance of further plant diseases and plant pests into the United States, such as have, in the past, been so injurious to the forests, fields, farms, and orchards of the country.

(b) It is claimed that the quarantine is unjust to the European countries that supply such a large amount of the plants and plant products which will be excluded by the quarantine.

Aside from the fact that this quarantine will put this country more nearly on a par with the chief plant exporting countries of Europe, which have, for a long time, maintained almost absolute prohibition against plant imports from the United States, it should be sufficient to point out that a quarantine, which admittedly will cause loss to, and necessitate a period of readjustment on the part of some of our own citizens, should not be given up for the reason that it will adversely affect some citizens

of other countries, when it is designed to and will protect an immensely greater number of our own people from an injury and loss which experience has shown is certain to result if this quarantine is not enforced.

(c) Other matters, such as controversies which have arisen at the hearings and otherwise between the officials of the Department and some florists and nurserymen with reference, for instance, to the habits of particular insects or as to whether certain pests or diseases are really actively dangerous or as to whether they have ever been found in this or that class of imported plants, seem to me relatively unimportant and to call for little comment, as they do not affect the broader considerations on which this quarantine is based. What the facts are in each case, as maintained by the Department, is shown to be based on testimony of technical and scientific investigators and specialists and their testimony is, of necessity, a much more certain means of arriving at the truth than the more or less incidental observations of those whose time must be largely devoted to the commercial side of plant importation, propagation, and distribution, no matter how well established they may believe their conclusions to be.

As the result of my consideration of this entire matter, it appears to me that the Department had to face and solve this problem: Given the fact, on one hand, that any importation of plants and plant products is necessarily fraught with danger from disease or pests, and the further fact, on the other hand, that entire exclusion would be unwise at this time, how could a general quarantine be drawn so as to reduce to the lowest terms both the disease and pest dangers involved in importation and the injury involved in restriction.

In working out the solution of this problem, two considerations have been kept constantly in mind with reference to the different classes of plants and plant products to be covered by the quarantine order: (1) the necessity or importance of the particular plant and (2) the danger arising out of its importation. The quarantine, as finally formulated, has been the result of bringing to bear upon these two considerations such technical and scientific information as could be obtained from sources believed to be reliable.

Necessarily, there are all kinds of gradations, both in the risk of disease or infestation and in the importance or necessity of the various plants considered. Where the necessity is at the maximum and the risk is toward the minimum, the quarantine will be found to be inoperative, as, for instance, in the case of fruits, vegetables, and cereals, for food and similar purposes, and field, vegetable, and flower seeds. When, on the other hand, the risk is at the maximum and the necessity is at the minimum, the quarantine is found to be strict, as, for instance, in the case of plants whose roots are balled in ordinary earth.

It is clearly my opinion that the distinctions and classes in this quarantine order have been made only after careful consideration of the best information obtainable. It is also evident that the various restrictions embodied in the order are not necessarily final; one amendment has already been issued, that of February 12, 1919, with reference to the use of sterilized soil about the roots of imported plants. It is, therefore, always pos-

sible that further convincing evidence may make other amendments necessary, not only for modifying or removing restrictions now in force, but also for extending existing restrictions or adding further prohibitions thereto.

It is recognized that the enforcement of certain features of this quarantine order will injure some horticultural interests, not only by necessitating readjustments but by the possible loss of some lines of profit. Such provisions, however, have been inserted only because it was believed, on satisfactory evidence, that they were necessary in order to protect the wider interests of the public at large.

It is also recognized that some of the plants and plant products, whose importation has made them more or less popular, will become rarities until they can be produced in this country and, if, as seems likely in a few cases, this turns out to be impossible, that it will be necessary for the public to do without them or to accept a substitute which can be produced here or which can be imported with safety.

In any discussion of the purpose and effect of this quarantine order, the fact should not be overlooked that definite provision is made therein for the entry, in limited quantities, even of the prohibited bulbs and plants, through the Government Office of Foreign Seed and Plant Introduction. In such case, the importation would be safeguarded by the highly developed quarantine and inspection service of the Department and the country could, in this way, gradually be supplied with new varieties and the necessary stock for propagation, without the dangers attendant upon commercial importations.

In view of the facts and considerations above set forth, it is my opinion that Plant Quarantine 37 is scientific in origin and purpose, as well as sound in principle, and that its enforcement will make for the safety of the plant, fruit, and forest interests of the country, with as little injury to private agencies and individuals as is compatible therewith.

Very truly yours,

D. F. HOUSTON, *Secretary.*

EXPLANATION OF PROVISIONS FOR ENTRY OF PLANT NOVELTIES AND PROPAGATING STOCK UNDER QUARANTINE NO. 37.

April 10, 1919.

Regulation 14 of the regulations relative to the importation of nursery stock and other plants and seeds has been revised and reissued. In its new form it is essentially an interpretation of the old regulation 14 rather than an enlargement of powers under the quarantine, inasmuch as the regulation, as worded in the quarantine as originally issued, was intended to cover exactly what is now more clearly stated in the new regulation. This regulation provides for the importation under a special permit from the Secretary of Agriculture, of limited quantities of otherwise prohibited stock for the purpose of keeping the country supplied with new varieties of plants and stock for propagation purposes not available in the United States. This amendment, however, does not apply to a few plants which have been specifically prohibited entry under other quarantines, as, for example, pines, Ribes and Grossularia from certain countries, and citrus, banana, and bamboo stock.

The following explanations of regulation 14 are given to indicate the limitations under this regulation and the procedure to

be followed in making importations of the two classes of plants specified, namely, new varieties and necessary propagating stock.

The expression "New Varieties" is understood to mean plant novelties, that is, new horticultural or floricultural creations or new discoveries.

"Necessary Propagating stock" is understood to mean stock of old or standard varieties imported for the multiplication of the plants in question as a nursery or florist enterprise as distinguished from importations for immediate or ultimate sale of the stocks actually imported, and such importations will be restricted to stocks which are not available in this country in adequate quantities.

The expression "Limited Quantities" used in regulation 14 is understood to mean with respect both to new varieties and to standard stocks, such quantities as will supply reasonable needs for the establishment of reproduction plantings which may be thereafter independent of foreign supplies.

There is no limitation as to the number of permits for different plants or classes of plants under regulation 14 which an individual may request, but the applications will all be passed upon both as to necessity for the particular importation and as to the quantity adequate for the purpose intended, by experts of the Department, for the information of the Board prior to the issuance of the permits.

All importations under regulation 14 must be made under special permits through the Office of Foreign Seed and Plant Introduction of the Department of Agriculture but for the use of the individual importer. The importer will be required to meet all entry, transportation and freight-handling charges. The Department will make no charge for inspection and supervision. The necessary procedure for making such importations is as follows:

1. The Federal Horticultural Board will supply, on request, an application blank upon which request may be made for a special permit to import. This application embodies an agreement on the part of the importer that if the imported material is found on examination by an inspector of the Department of Agriculture to be so infested or infected with insects or disease that it cannot be adequately safeguarded, it may be destroyed and such destruction will not be made the basis of a claim against the Department of Agriculture for damages. The application must be accompanied by a statement certifying that the plants to be imported are novelties or if standard varieties of foreign plants, that stocks in adequate quantities for their propagation are not available in this country, and that in either case they are to be imported for the establishment of reproduction plantings and not for immediate or ultimate sale of the stocks actually imported. In exceptional cases the importation of novelties may be made for personal use but not for sale. The application must also give the name and address of the exporter, country and locality where the stock was grown, the name and address of the importer and the name and address of the nursery or other establishment in which the plants are to be reproduced on release.

2. If the permit is issued, the applicant will be furnished shipping instructions and shipping tags to be forwarded with his order to the exporter. The plants will, in consequence, be addressed in bond to the U. S. Department of Agriculture, Bureau of Plant Industry, Washington, D. C., United States of America, and indorsed, "Foreign Seed and Plant Introduction, for (insert name of importer)," and arrangements must be made with some responsible agency in Washington for the clearance of the plants when received through the Custom House at Georgetown, D. C., together with the payment of all charges involved.

3. Upon clearance through the Georgetown Custom House the material will be turned over to the Office of Foreign Seed and Plant Introduction by the authorized agent of the importer, and in the specially equipped inspection houses and under expert care as to the welfare of the plants, be carefully examined by inspectors of the Federal Horticultural Board. If found free from dangerous insects or diseases, the shipment will be immediately and carefully repacked and forwarded by express, charges collect, to the importer.

4. Cleaning and disinfection will occur for slight infestation, but should the material be found to be so infected or infested with either disease or insects that it cannot be so adequately safeguarded, it will either be destroyed, or, when possible and desirable, returned to the point of origin.

Yours very truly,

C. L. MARLATT, Chairman of Board.

Letters to the National Nurseryman

Rue d'Olive, Orleans, France, April 5, 1919.

National Nurseryman:

We read with great interest the various notes published in the issue of March of the "National Nurseryman."

We must first sincerely thank our American friends for the action of the American Association of Nurserymen in this matter.

It is surprising to see a man of the importance that Dr. Marlatt seems to have in your country, to be compelled to use such exaggerations in order to have his ideas admitted.

If the pests and insects described by him were existing in such quantities and were so disastrous as Dr. Marlatt says, not a single plant or tree would have been left alive in our "poor infested country."

This is certainly not the case and many of the young American nurserymen who fought our common enemy can certify that our gardens, nurseries, forests, etc., are not in the condition the Federal Horticultural Board would have you believe.

Many American nurserymen, personally know how clean and healthy the plants are that we ship to them every year. We must say we take every care to have the plants free from insects or disease and this can be done by every exporter if he is compelled to do so, by the service of inspectors of every country as it has been done in France for many years.

We are confident that sound reasoning will prevail and lead to the abrogation of the decree or at least to its alteration in a more reasonable way.

Believe us, dear sirs, yours most faithfully,

BARBIER & Co.

Waxahachie, Texas, April 21, 1919.

To Members of American Association of Nurserymen:

I congratulate you upon the present season's business, which has been the very best from every point of view in many years. Everybody will "clean up" this season. For once in our lives there has been no brush pile. The spirit of optimism again bids hope lead on to higher endeavor in American Horticulture. I predict a splendid spirit for the Chicago convention, and urge every member to attend the June convention.

PROGRAM

The program committee, composed of Messrs. E. M. Sherman, J. W. Hill, and Orlando Harrison, are on the job, and the personnel of this committee guarantees a live, constructive program. One entire session will be given over to consideration of Market Development plans, the importance of which is recognized by all. The afternoon of the first day will be occupied with report of the committee on "Policy," and I hope every member will arrange to be in his seat when this report is presented. In a definite way not heretofore attempted, the committee on Policy will endeavor to recommend to the convention a policy for American Association of Nurserymen. What does the A. A. of N. stand for? A special committee will

endeavor to place before the convention something definite for its consideration. Following this report at the same session will come the report of the Executive Committee, which most probably will embrace recommendations for a working organization for the Association. Altogether, the first day of the 1919 convention, and every day for that matter, will be crammed full of work. We are going to Chicago in June earnestly determined to "do things," and every member should have a part in the program.

A thousand nurserymen of America are not members of the Association who, from every point of reasoning, should be. To every worthy nurseryman a cordial invitation is extended to join the A. A. of N. Secretary Sizemore, Louisiana, Mo., will be pleased to forward application blanks to any one desiring membership, and to all such the Association bids you welcome. "Come and go with us and we will do you good."

Yours for a great meeting,

J. R. MAYHEW, *Pres.*

MEMORIAL TREES

Since the idea of memorial trees was suggested by the William H. Moon Co., the idea has become very general. In fact, it is difficult to pick up a newspaper now that does not speak of memorial tree planting, and no monument more worthy and fitting could possibly be raised than a tree to honor those whom we wish to honor.

Nurserymen should do everything in their power to encourage, foster and help the practice along. The supplying and planting of a memorial tree should be more than a mere act of business. A man should put his entire experience and effort in the selection and supplying of trees that are suitable and that will serve the purpose for which they are intended.

Encouragement should be given to select those desirable long-lived trees such as Oak, Ash, Elm, or the best tree adapted to the particular position or location where it is to go.

The week of April 7th we received from L. J. Farmer, Pulaski, N. Y., a sample fruit of the Oswego Apple that had just come out of a cellar. To us this was a remarkably fine sample of fruit for this time of the year. It was quite firm, beautiful in color, medium size, and its condition and flavor for this time of year show remarkable keeping qualities.

The Apple is comparatively a new one and is believed to be a cross between a Northern Spy and Spitzenberg, but instead of having the spots or splashes of the Spy it is a clear red, and has the small dots like those of the Spitzenberg near the calyx.

According to the growers it is a constant and sure bearer, the original tree having borne a crop of fruit every year since it was discovered. It should be worth investigation from fruit growers as it appears to have all the qualities for a good commercial apple.

A little daughter was born in the home of Mr. and Mrs. James McHutchison on March 29th; both mother and daughter are doing well.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., May 1919

Subscribers to "Nurserymen's Fund for Market Development"

"Soil with Potted and Balled Plants
QUARANTINE 37 a special Source of Danger."

Dr. Marlatt makes the above
statement in a memorandum dated February 1st, 1919.

The Department of Agriculture has also incontestable
proof of 148 species of injurious insects to be found in
nursery stock imported from Holland.

If this is so the preliminaries of putting Quarantine
37 into effect has certainly introduced every last one of
the species into this country and they are all primed to
commence their work of devastation of gardens, orchards
and forests.

Never before has so much Dutch earth been imported
into this country from the nurseries of Holland in one
year, and think of it, after four years of war when the
nurseries of the other side were under manned and so,
not in as clean and sanitary condition as hitherto.

If the prime consideration of Quarantine 37 was to
prevent the importation of injurious insects it has de-
feated its own object and if there was danger it has
added greatly to it over what there would have been un-
der normal importing conditions and careful inspection.

After reading all the statements in connection with
Quarantine 37 and noting the conflicting currents of
thought on the subject the whole subject seems to re-
solve itself into a matter of beliefs.

Giving credit to everyone for sincerity there remains
nothing but to fight it out according to convictions.

The entomologists are in power and able to enforce
their will upon the horticulturists so the public must
abide by the decision.

Neither side denies there are insects and diseases
which should be kept out of this country if possible.

Based largely on circumstantial evidence and theory

the entomologists have decided there is a danger in im-
porting plants, and caused to be put in force a law that
excludes plants on the theory that it will exclude in-
sects also.

The horticulturists question the theory and resent their
business being interfered with and being made to bear
the onus of being the cause of the introduction of epi-
demies and plagues that may attack the vegetation of
the country, which may just as readily be carried by
other vehicles or caused by conditions quite foreign to
those attending the importation of plants.

The entomologists doubtless are doing what they con-
sider to be right and for the best interests of the country
at large, but they will have to work the bug-a-boo over-
time to keep the country convinced bugs are being kept
out by a law that keeps out their garden treasures.

The annual crop of diseases and pests will show no
diminution, peaches and apples will become no more
plentiful.

With all the science of medicine concentrated on one
genus for a century its final decision is right living is
more effective against disease than anything else.

The parallel is easily seen, proper cultivation and care
is the best quarantine that can be established.

REAL PLANTSMEN
NEEDED

We may carp and criticize the
Government and incidentally the
U. S. D. of A., the Federal Horti-
cultural Board, and all those who
in any way try to regulate the doings in the Horticultural
world, we may growl about labor, high cost of every
thing and low prices of nursery stock, but like religion
the great fundamental need in our particular business is
love, love of plants for the plants sake and not for the
dollar that can be made out of it.

It is true the nursery business is merchandising but it
is a great deal more. It is growing and caring for plants
for years to bring them as near perfection as possible
before you sell them. It is watching, thinking and caring
for them carefully, constantly catering to their wants,
studying their peculiarities protecting them against
drouth, heat and cold, attacks of insect pests and disease.

When talking with the proprietor of one of the largest
growers of ornamental plants in the United States, he
expressed himself as rich in plants and poor in money
and bewailed the fact that he did not have a real plants-
man in his establishment, a man who was really inter-
ested in plants. Such a man could name his own salary
as he would be invaluable. But with the real plantsman
the pay envelope and clock are only a secondary consid-
eration.

I can imagine the cynical smiles that such a statement
will produce but it is none the less true and the one great
need is some method or procedure that will take the place
of the indentured apprentice, that will train young men in
their profession, and develop a code and standard of
work very much above the present one.

America as a country is accused of being sordid and
commercial. The war has proved beyond question she is
idealistic, altruistic and charitable and there is a constant
hunger for art and the better things of life.

We have more than enough of science, and business
efficiency but we are extremely short on that plodding pa-

tience and self sacrifice that is necessary to produce the master workmen so necessary in horticulture.

Since Quarantine 37 has become law there has been much said about the United States being able to grow all plants that have hitherto been imported.

Unquestionably the potential possibilities are here but neither the trained workmen nor the generations of accumulated experience passed along from master to journeyman and apprentice without which we can only produce something to sell but not to be especially proud of.

Our scientific rulers have decided there is danger in importing the produce of the skilled workmen of Europe so the country now depends upon our own efforts and like the store clerk we shall be offering the public something "just as good" until we have raised or imported growers who think more of their plants than their pay envelope. In the meantime, our gardens, orchards and parks must take a lower level of horticultural beauty, that is, unless the women say no.

When we realize the fact that plants have no national boundaries, it seems foolish to attempt to legislate and control their movements. Perhaps this statement may be set aside as ill-considered when there is apparently so much evidence that the transportation of plants introduces conditions and effects that have tremendous economic results, and no sane man would attempt to advocate an uncontrolled and free exchange of plants the world over without restrictions. The restrictions, however, should be such that are reasonable and based on actual and full knowledge of their necessity. The activities of men, require laws to govern them, but it can hardly be said the same of plants.

Here we are dealing with creation over which we have practically little or no control. The natural laws are working quite independent of any that may be enacted by Congress. The deep thinker can only come to one conclusion, and that is that man is troubled with supreme egotism. He seems to think that the whole of creation was made especially for his benefit, instead of he being merely a portion of it.

At times of epidemic or great disaster from what might be called natural causes it is brought home to him the fact that the natural laws at least work quite independent of any that he might put into operation. It is quite true he can study, analyze, and to a certain extent protect himself from adverse causes and conditions, but after all he is extremely helpless, and is only a part of the animal creation which he attempts to govern.

It is true he can take the Wild Crab and through generations develop the Baldwin and Delicious Apple, or the wild single Rose and produce ultimately the beautiful double blossoms that fill the florist's window, but he cannot make the cocoanut grow in Montana, except under artificial conditions. The same laws which prevent him doing this also prevent him from controlling insect pests and diseases, except within very small limits.

The numerous laws that are now being enacted in connection with plant life would seem to indicate that at least he thought he could do a good deal more, but in reality he is only doing so in his own mind. There is no

record where he has been able to even check the progress of disease or insect pest upon plants. These scourges, if they may be called so, come and go according to the particular cycle of conditions under which they exist. He may possibly keep his own particular plot of ground clean and that is about the limit, but that these limits will ever extend to national boundaries is even foolish to consider.

In looking back, the San Jose Scale, the Potato Beetle, the Gypsy Moth, Brown-tail Moth, plagues of Aphis, Chestnut Blight and the endless fungus diseases are really all part of creation, which are linked together. If one or the other becomes dominant it is due to conditions which favor it doing so, not through accidental or intentional introduction of it into the country.

TENNESSEE HOUSE BILL NO. 910

A bill is before the Legislature in Tennessee providing for registration before anyone can ship nursery stock, plants and bulbs into the State.

The registration will cost \$10.00 and every agent soliciting orders within the State of Tennessee must secure a license even if the stock is to be shipped from outside of the state which will cost \$1.00.

If this bill becomes law it will prevent a citizen of the State from going over the border line, purchasing a plant and taking it home with him.

There are beginning to be as many restrictions and regulations governing the traffic of nursery stock as if it were in the rum class.

RAFFIA

The embargo on raffia still continues but the U. S. War Department has ordered shipments, due to arrive this week, released. These will be the first to arrive since a few months after the war began.

James McHutchison & Co., New York, one of the largest importers of this material in the country, turned over its entire stock to the government when this country entered the war. It was used for camouflage purposes in France but will now begin to go along peace time channels and be used by the nurserymen.

MYSTERIOUS DISEASE ON APPLE TREES EXPLAINED

Considerable concern is being shown by orchardists in central and northern Ohio over the fact that limbs of apple trees are dying and large cankers are appearing in the crotches of the trees. This is not any mysterious disease, says Frank Beach, extension horticulturist of the College of Agriculture. It is merely a further indication of the winter injury caused in 1917.

It is recommended that the dead wood be cut off and that the bark about the cankers be cut back abruptly to the live bark sometime between now and June. The cankers should be treated with a thick paint of white lead and raw linseed oil.

The trees that show considerable injury should be fertilized with manure or nitrate of soda.

THE AMERICAN ROSE ANNUAL

The American Rose Annual, the official publication of the American Rose Society, for 1919, edited by J. Horace McFarland, has been issued. There may be some phase of information about roses as they are grown and known in this country, that may have been omitted from this work. If so, it will take some other than the average rose lover to notice it.

As a rule "Annuals" published by societies are books that are casually glanced through and then put on the shelf, but anyone with the least interest in roses could hardly imagine such a fate for the work just published. The fact that it is published by the Mount Pleasant Press is sufficient guarantee of its good workmanship. The frontispiece is an excellent colored plate of E. G. Hill's new American-bred Hybrid Tea, Rose Premier.

Mr. McFarland has called to his assistance some of the leading authorities on the subject of roses, who have contributed articles. In an analysis of the supply and demand of roses, the author states:—"Due to the war the country is from three to five million roses short this year, and with the quarantine against imported plants going into effect next June, this shortage will be greatly increased in succeeding years unless provision is made to supply it."

The Rose Annual is becoming international in its scope in dealing with its subject. The author evidently recognizing that craftsmen belonging to the Guild of rose growers knows no national boundaries, interest and love for the Queen of Flowers being the only essential to become a member.

The American Rose Annual is a publication that is mailed to all members of the Society. The annual dues of \$2.00 entitles them to a copy. Extra copies may be purchased by members only for \$1.00. As only the required number of copies are printed each year it is necessary to send in orders for the extra ones early.

NITRATE OF SODA BETTER THAN COW MANURE

A paper, "Twenty years' work on the availability of nitrogen in nitrate of soda, ammonium sulphate, dried blood, and farm manures," J. G. Lipman and A. W. Blair, from the New Jersey Experiment Stations, say:

The conclusions reached may be summarized as follows: In a 5-year rotation on Penn loam soil well supplied with phosphoric acid, potash, and lime, crop yields were better maintained over a period of 20 years with nitrate of soda at the rate of 320 lbs. per acre than with an equivalent amount of ammonium sulphate or dried blood. The latter gave results for several years about on a par with the nitrate, but an average of the second 10-year period showed a considerable falling off. This is thought to be due to the fact that the nitrate, being immediately available, gives the plant an early start which tends to keep it in the lead, and to the further fact that in the transformation of the ammonium salt and the organic material into nitrates there is a considerable loss of nitrogen, possibly as ammonia gas, gaseous nitrogen, or both, although this loss can not all be attributed to a leaching out of the materials, even though the nitrifica-

tion of ammonia and organic residues may go on throughout a large portion of the year.

Cow manure at the rate of 16 tons per acre gave somewhat larger yields than nitrate of soda, but the increased yields were not sufficient to justify the increase in the cost of nitrogen. Furthermore, the average yield with the manure was less for the second 10-year period than for the first, an application of 16 tons of manure per acre annually failing to maintain crop yields.

The percentage of nitrogen recovered in the crop for the 20-year average was as follows: Nitrate of soda 62.42, ammonium sulphate 47.48, dried blood 38.69, and cow manure 32.69 per cent. The average recovery with nitrate for the second 10-year period was 64.35 per cent as against 60.48 per cent for the first 10-year period, whereas the average recoveries with ammonium sulphate, dried blood, and manure were all less for the second 10-year period than for the first.

The results are held to indicate "that when properly used nitrate of soda alone as a source of nitrogen may be depended upon to maintain crop yields over a long period, and that a given amount of nitrogen in this form is more effective than an equivalent amount in the form of ammonium sulphate or organic materials. Its effect is to produce larger crops per unit of nitrogen, and these crops, in turn, leave behind in the soil larger crop residues, and, with carbonate of lime to aid in their decomposition, these furnish a sufficient supply of organic matter to keep the soil in good physical condition."

CROWN-GALL INJURY IN THE ORCHARD

D. B. Swingle and H. E. Morris, from Montana Sta. Bulletin 121 (1918)

In order to determine the ultimate effect of crown gall on apple trees, an experiment was conducted in which 12 healthy and 12 diseased trees of each of 10 varieties were set in an orchard in May, 1910. The trees were thoroughly examined when planted, carefully set, and well cared for, and final notes were taken upon them in 1917.

At this time it was found that but few of the galls had disappeared entirely, while most of them were still growing, and some had increased very materially in size. The hairy root condition was very little in evidence and in most cases could scarcely be found. Careful observation showed some differences in the appearance of the healthy trees and that of the diseased trees, and the root systems of the diseased trees were plainly inferior. With exception of Northwestern Greening and Wealthy, there was a dwarfing of the trees on which crown gall was apparent, the average reduction in trunk circumference amounting to 1.58 in. The most striking fact brought out by the experiment was the greatly disturbed balance between the tops and the roots of the affected trees. The dwarfing is said to have been much greater in the roots than in the parts above ground, and the hairy root condition, in so far as it develops at the expense of strong anchor roots, is considered very important.

Mr. James McHutchison has returned to business after an absence, due to illness, of eleven months.

APPLE BUD SELECTION AND APPLE SEEDLINGS FROM SELECTED TREES

C. S. Crandall, Illinois Experiment Station.

In connection with apple breeding investigations started in 1907 a minor project in bud selection was undertaken to determine whether or not there are differences in value for the purposes of propagation between large buds and small buds, between buds produced on different parts of the tree, and between buds from different locations on the shoot. Another project undertaken at this time consisted in growing apple seedlings from fruits from trees chosen as possessing special merit. This bulletin brings together the records thus far made in connection with these projects, presents the methods pursued, and gives the status of the trees growing under each of the projects.

Summing up the data relative to size and position of buds used for propagating, it is concluded that there are no differences for this purpose between buds of large size and those of small size. Growth curves of trees propagated from buds from different situations on the trees so closely approximate as to indicate that it does not matter from what situation on the tree the buds are taken. All buds from healthy shoots are of equal value for purposes of propagation, at least so far as growth of trees is concerned.

There were decided and often extreme fluctuations in growth of individual trees within particular groups. In general, differences became less with increase in age, provided the trees remained healthy. No marked difference was observed in the growth of trees propagated from robust scions and those propagated from scions of small diameter. Studies of annual increments support and emphasize the fact of distinct individuality in the growth of trees.

The apple seedlings grown from fruit from selected trees have not come into bearing thus far. Observations and data secured relative to the growth of these seedlings, however, indicate that seedlings from seeds of large fruits are somewhat more resistant to adverse conditions and possess a higher degree of vitality than do seedlings from seeds of small fruits.

GEORGIA-FLORIDA PECAN GROWERS' ASSOCIATION

*Program and Announcements 13th Annual Convention,
Tallahassee, Florida, May 28-29, 1919*

PROGRAM

Wednesday, May 28, 1919, 10 A. M.

Call to Order

Invocation - - - Rev. S. W. Lawler
Address of Welcome.

Hon. W. A. McRae, Commissioner of Agriculture
Response to Address of Welcome.

H. H. Simmons, Jacksonville, Fla.
President's Address - R. B. Small, Columbus, Ga.
Is a Pecan Grove a Profitable Investment

B. W. Stone, Thomasville, Ga.
Management of Bearing Pecan Groves for Best Results

H. K. Miller, Monticello, Fla.
Question Box

Wednesday, 2.30 P. M.

Observations on Rosette

S. M. McMurran, Thomasville, Ga.
Nut and Leaf Case Bearer, - J. B. Gill, Monticello, Fla.
Spraying and Spraying Outfits

J. B. Demaree, Thomasville, Ga.

Question Box

Fish Fry—6 o'clock—Newport, Fla.

Thursday, May 29, 9.30 A. M.

Latest Developments in Pollinization

H. P. Stuckey, Experiment, Ga.
Organization and Operation of the Georgia Fruit

Exchange - W. B. Hunter, Atlanta, Ga.
The Maximum Tree - C. A. Reed, Washington, D. C.
Sales Experience of the National Pecan Growers'

Exchange - W. P. Bullard, Albany, Ga.
Miscellaneous Business.

Report of Standing Committees.

Report of Special Committees.

Selection of Place of Next Meeting.

Election of Officers.

INFORMATION

All meetings are open to the public and will be held at the court house. All who are interested in nut growing are invited to attend.

Convention headquarters will be at Leon Hotel.

Swimming at Newport before supper Wednesday afternoon.

Conveyances will be provided for members wishing to visit local groves Thursday afternoon.

For further particulars, address R. B. Small, president, Columbus, Ga., and W. M. Parker, secretary, Thomasville, Ga.

Local Arrangement Committee—Nathaniel Brewer, Jr., Slater Wight, E. Q. Smith, F. T. Nesbit, Mrs. F. R. S. Phillips, Tallahassee, Fla.

QUARANTINE ON ACCOUNT OF BLACK STEM RUST

Notice of Quarantine No. 38.

(Effective on and after May 1, 1919.)

The fact has been determined by the Secretary of Agriculture, and notice is hereby given, that the common barberry (*Berberis vulgaris*) and its horticultural varieties, as well as other species of *Berberis* and *Mahonia*, are capable of harboring the black stem rust of wheat, oats, barley, rye, and many wild and cultivated grasses. Through the co-operation of the Department of Agriculture with State officials, local organizations, and individuals, susceptible species of barberry and *Mahonia* have been very largely eradicated from the States of Nebraska, Iowa, Illinois, Indiana, Ohio, North Dakota, South Dakota, Minnesota, Montana, Wisconsin, Michigan, Wyoming, and Colorado.

Now, therefore, I, David F. Houston, Secretary of Agriculture, under the authority conferred by Section 8 of the Plant Quarantine Act of August 20, 1912 (37 Stat., 315), as amended by the Act of Congress approved March 4, 1917 (39 Stat., 1134, 1165), do hereby quarantine, effective May 1, 1919, the States of Alabama, Arizona, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Idaho, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Mississippi, Missouri, Nevada,

New Hampshire, New Jersey, New Mexico, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, and the District of Columbia, and by this Notice of Quarantine No. 38 do order that no plants of the following species, *Berberis aethensis*, *B. altaica*, *B. amurensis*, *B. aristata*, *B. asiatica*, *B. atropurpurea*, *B. brachybotrys*, *B. brevipaniculata*, *B. buxifolia*, *B. canadensis*, *B. caroliniana* (carolina), *B. coriaria*, *B. cretica*, *B. declinatum*, *B. fendleri*, *B. fischeri*, *B. fremontii*, *B. heteropoda*, *B. ilicifolia*, *B. integerrima*, *B. laciflora*, *B. lycium*, *B. macrophylla*, *B. neapalensis*, *B. neubertii*, *B. siberica*, *B. sieboldii*, *B. sinensis*, *B. trifoliolata*, *B. umbellata*, *B. vulgaris* including its subspecies and horticultural varieties, *Mahonia aquifolium*, *M. diversifolia*, *M. glauca*, and *M. repens*, shall be moved or allowed to move interstate to points outside of the quarantined area.

This quarantine shall not apply to the movement by the United States Department of Agriculture of the products named for experimental or scientific purposes.

Done in the District of Columbia this 15th day of April, 1919.

Witness my hand and the seal of the United States Department of Agriculture.

D. F. HOUSTON, *Secretary of Agriculture*.

THE WORK OF THE RED CROSS GOES ON

The great humanitarian trend that has developed as an aftermath of the horrors of the war has awakened the peoples of all countries to the immediate need for developing these humanitarian efforts along the broadest lines.

The amazing percentage of men rejected for military service because of physical conditions that might easily have been prevented; the pitiful wastage of manhood and womanhood through under-nourished and under-developed childhood; the terrible mortality consequent on epidemics which, if not actually preventable would at least have been more controllable if humanity at large had a better understanding of hygiene and sanitation, all these things have been brought so forcibly before the minds of thinking people that remedial efforts are not only necessary but imperative.

To turn to the Red Cross as a medium through whom this widespread educational campaign may be carried on all over the globe is a natural result. Closely in touch with every phase of relief, whether it be war, disaster, epidemic or the personal contact with individuals maintained through the special branches of its work, the Red Cross is peculiarly well fitted to aid in this international service.

At the present time there is in session at Cannes, France, a conference attended by some of the foremost specialists of the medical and sanitary professions of Great Britain, France, Italy, Japan and the United States.

The problem which these men are discussing is one of the most serious ever faced by the Red Cross, and deals with the organization of an International Council and Bureau of Hygiene and Public Health which will consider the work to be undertaken in connection with the prevention of epidemic disease, tuberculosis, venereal disease and child welfare. The results of this conference will be

submitted to the International Conference of Red Cross Societies to be held at Geneva, Switzerland, thirty days after peace is officially declared. This Red Cross Committee will be composed of representatives from the Red Cross Societies of the five countries represented at Cannes and Henry P. Davison, formerly Chairman of the War Council of the American Red Cross, will act as Chairman.

The outgrowth of this congress will be a permanent working organization, with headquarters in Geneva, whose personnel will be made up of experts who will keep in touch with the developments throughout the world of the various matters in which the Red Cross is interested and through whom each Red Cross organization will be kept in touch with the march of human events. Not only will the peace activities of the Red Cross be directed toward the relief of human suffering and its prevention, but an effort will be made to arouse all peoples to a sense of their responsibility for the welfare of their fellow beings.

During the last four weeks James McHutchison & Co., Importers, New York, have received from Holland over 1950 cases and bales of nursery stock. All are now sold. This rush was due to the Hollanders getting rid of the varieties grown for American trade before the door closes.

NOTES FROM THE ARNOLD ARBORETUM

UNFOLDING LEAVES. Much is to be learned of trees by the study of their unfolding leaves. The color of these and the absence or presence of a covering of down may, for some trees like the Lindens, furnish the best characters for distinguishing related species. This is certainly one of the best times of the year for the study of Oak-trees and Hickories. The unfolding leaves are often brilliant in color, and their hairy covering, when such a covering exists, furnishes a useful character for determining such trees. Very beautiful and interesting, too, are the very young leaves of the Horsechestnuts. Indeed there is not a tree or shrub which, as the leaves unfold, is not capable of affording an observing lover of plants much information and the keenest pleasure, and this is a pleasure which can be found in the Arboretum in a new form every day from the unfolding in early April of the leaves of the California *Osmarona cerasiformis* and the Chinese *Prinsepia sinensis* to the appearance of those of the Fringe-tree (*Chionanthus virginica*) which remains leafless until after the flowering of many shrubs and trees has passed.

THE WILD PEAR-TREES. Much attention has been paid to the formation of the Arboretum collection of these trees because several of the species are among the most beautiful of all flowering trees. To pomologists, too, they are of special interest as the wild types from which the cultivated pears have been derived, and as possible factors in the production of new and perhaps hardier races of fruit trees. Wild Pear-trees are found in China, on the Himalayas, in southwestern Asia and in southeastern and southern Europe. There is no native Pear-tree in Japan or in any part of America. About twenty-five species are recognized by botanists, and of these at least twenty with

a few hybrids and varieties are now established in the Arboretum. The most important species but not the most beautiful in flower is *Pyrus communis*, one of the European species from which the common garden pears have been derived. The wild form of this tree is in the Arboretum collection. Some of the species, like *P. elaeagnifolia* of southeastern Europe, are conspicuous in early spring before the flowers open from the silvery color of the unfolding leaves, but as ornamental trees some of the Chinese species are better worth cultivating here than those of Europe or western Asia. All the eastern Asiatic species are now growing in the Arboretum; many of them have large, handsome and lustrous leaves, and on a few the fruit is conspicuous. Among the Chinese species which have been thoroughly tested in the Arboretum the handsomest perhaps is *P. ovoides*, a native of the northern provinces and one of the first in the collection to open its flowers. These are followed by yellow juicy fruits of good flavor which, unlike those of all other Pear trees, are largest at the base and gradually taper to the apex. Another remarkable thing about this tree is that in the autumn the leaves turn as bright scarlet as those of any Asiatic Red Maple or Gum tree. As an ornamental tree this Pear deserves the attention of gardeners and its hardiness and the quality of its fruit suggests its possible value in the production of a new race of fruit trees. Another Chinese species, *P. Brelschneideri*, is also well worth the attention of pomologists; it is a tree with large lustrous leaves, large flowers and yellow, nearly globose fruit of good flavor. This is probably, in part at least, the wild origin of the excellent pears which are sold in Peking during September and October. The brown-fruited *Pyrus serrulata*, one of the new species discovered by Wilson in western China, is of particular interest, too, as from this species are evidently derived the round russet pears which in many forms have been so generally cultivated in Japan and are occasionally seen in American collections. The largest specimen of *P. serrulata* in the Arboretum is growing among the Japanese Azaleas on the southern slope of Bussey Hill where it flowered for the first time last year. The Leconte and the Keiffer are two hybrid pears well known in this country where they were raised many years ago by crossing a garden pear with some Chinese species of doubtful identity and uncertain origin. These hybrids have not proved very hardy in the north, but have been planted in immense numbers in some of the southern states where they produced large crops of fruit until the trees were attacked by the Pear blight which has ruined many of these orchards. *P. ovoides* has been growing in the Arboretum for eighteen years and *P. Brelschneideri* for thirty-four years and have never been attacked by the Pear blight. It is suggested that by crossing these species with some of the garden Pears valuable results in the way of a new and very hardy race of Pear-trees may be secured. Among hybrid plants in this group attention is called to

PYRUS MALIFOLIA. This is a natural hybrid between the common Pear and the White Beam-tree of Europe, *Sorbus Aria*, and is very similar and perhaps a seedling of the hybrid Bollwyller Pear which appeared in Alsace more than three hundred years ago as it was first mentioned by the botanist Bauhin in 1619. *P. malifolia* has large pale oval leaves and large flowers in few-flowered

clusters. It is perfectly hardy and a remarkably fast-growing tree which promises to attain a large size in this climate. It well deserves a place in New England collections of flowering trees.

THE ASIATIC CRABAPPLES are beginning to flower and as the American species do not bloom until later it will be possible to enjoy in the Arboretum the beautiful flowers of these trees for several weeks. The collection is a large one and now contains plants large or small of all the American and Old World species with the single exception of the little known *Malus formosana*, a native, as its name implies, of the island of Formosa. The collections made by Mr. Wilson in China and Japan have thrown much light on several of the Asiatic species which are now much better known than they were a few years ago. The discovery that a common Apple-tree of western China, largely cultivated as a fruit tree in the mountainous districts of Hupeh and Szechuan, is a form of *Malus prunifolia* which, although it has been in European gardens for nearly a century, was not known before as a wild tree, is interesting. This form is now called *Malus prunifolia*, var. *rinki*.



From the U.S.D. & A.

FUTURE SHORTAGE OF APPLES

Following the world war, the export markets are not only to be reopened but possibly may assume a larger importance than ever before. Commercial apple growers in the United States must meet any such increased demand without increased acreage. Apple production does not respond quickly to supply and demand. Trees require several years to come into full bearing. Little can be done toward immediately increasing the supply when an unusual demand appears.

MUST INCREASE PLANTINGS

Taking the United States as a whole, there has been very little planting of apple trees since 1910. Comparatively few young trees, therefore, are coming into bearing at this time. This is shown by an investigation of the commercial apple industry recently made by the United States Department of Agriculture. Indeed, the largest single commercial apple-producing section in the United States has reached its maximum production, and unless the planting rate increases a decline is to be expected.

That region is Western New York which, early in the sixties, became and has since remained the center of commercial apple production in the United States. Western New York has produced regularly about one-fourth of the normal commercial apple crop of the country. But most of the present bearing trees were planted in the late sixties and early seventies and are now nearly 50 years old. Vigor and productivity continue longer in Western New York than anywhere else in the country, perhaps, yet they cannot be maintained indefinitely, and the center of production may be expected to shift. Similar declines are taking place in what is known as the New England Baldwin belt, including portions of Maine, New Hampshire, Vermont and Massachusetts, but as this

has never represented more than 5 per cent of the total commercial production it is of relatively less importance.

OTHER PRODUCTION CENTERS

In latter years two comparatively new commercial apple regions have come into large production—the Pacific Northwest and the Shenandoah-Cumberland region of Virginia, West Virginia, Maryland and Pennsylvania. The former is producing now almost as many commercial apples as New York, and the latter is producing about half as many. Roughly speaking, New York, the Pacific Northwest and the Shenandoah-Cumberland produce about five-eighths of all the commercial apples grown in the United States. The Shenandoah-Cumberland region is yet only approaching its maximum production. In the Northwest there was considerable planting of unsuitable lands, but western production is being stabilized and will continue to be an increasingly important factor in the apple industry.

Other regions of considerable commercial apple production are the Piedmont district of Virginia, the Hudson Valley, southern Ohio, western Michigan, southern and western Illinois, the Ozark Mountain region of Arkansas and Missouri, the Missouri River region of Iowa, Missouri, Kansas and Nebraska, the Arkansas Valley region, California and Colorado.

Investigation of commercial apple production was begun by the Department of Agriculture in 1917, and a survey has been made of every important apple-producing county in the United States. As a result of this investigation, a carefully organized system has been perfected for issuing regular monthly reports during the growing season, forecasting commercial apple production. This service has been extended to peaches, and soon will include pears and other fruits.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC.

Required by the ACT OF CONGRESS OF AUGUST 24th, 1912

Of the NATIONAL NURSERYMAN, published monthly at Hatboro, Pa., for April 1, 1919.

State of Pennsylvania.

County of Philadelphia.

Before me, a Notary Public, in and for the State and the county aforesaid, personally appeared Thomas B. Meehan, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the NATIONAL NURSERYMAN, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation) etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24th, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse side of this form: to wit:

1. That the names and addresses of the publisher, editor, managing editor and business managers are:

Publisher—THE NATIONAL NURSERYMAN PUBLISHING CO., INC., Hatboro, Pa.

Editor,—ERNEST HEMMING, Flourtown, Pa.

Managing Editor,—Ernest Hemming, Flourtown, Pa.

Business Manager—THOMAS B. MEEHAN, Dresher, Pa.

When writing to Advertisers please mention the National Nurseryman.

2. That the owners are:

Mrs. Ellen B. Yates, Rochester, N. Y.

James McHutchison, Jersey City, N. J.

Thomas B. Meehan, Dresher, Penna.

Albert F. Meehan, Dresher, Penna.

Penrose Robinson, Hatboro, Penna.

3. That the known bondholders, mortgagees and other security holders owning or holding 1 per cent. or more of total amount of bonds, mortgages, or other securities are: NONE.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustee, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

THOMAS B. MEEHAN, Business Manager.

Sworn to and subscribed before me this 17th day of April, 1919.

Elmer Miller, Notary Public.

(My commission expires March 11, 1921.)

AMERICAN FLORIST'S TRADE DIRECTORY

Price \$3.00, Postpaid

For Sale By

NATIONAL NURSERYMAN PUB. CO. Inc.,
HATBORO, - - - PA.

Evergreens

Suitable for May Delivery

Abies, Douglassi, 3 to 4 feet.

Picea Alba, 3 to 4 feet.

“ Excelsa, 2 to 3 feet.

“ “ 3 to 4 feet.

Retinispora Picifera, 3 to 4 feet.

“ “ Aurea, 3 to 4 feet.

“ Plumosa, 2 to 2½ feet.

“ “ Aurea, 2 to 2½ ft.

Thuja Columbia, 3 feet.

“ Compacta, 12 to 15 inches broad.

“ Ellwangeriana, 3 feet.

“ Hoveyi, 18 to 24 inches.

“ Siberica, 18 inches.

“ “ Lutescens, 24 inches.

Compact, well grown plants.

W. B. COLE

PAINESVILLE, OHIO

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

STRAWBERRY PLANTS

Summer and Fall bearing varieties, shipped to you or direct to your customer under your tag.

Plants and service that pleases both you and your trade.

Let us quote you

V. R. ALLEN,

59 Lane Avenue

Seaford, Del.

SHADE TREES

We have a fine lot of Ash, Elm, Box Elder, Maple, Catalpa and HACKBERRY. Let us quote you prices on your wants. Can furnish them in carload lots.

GURNEY SEED & NURSERY COMPANY,
Yankton, South Dakota.

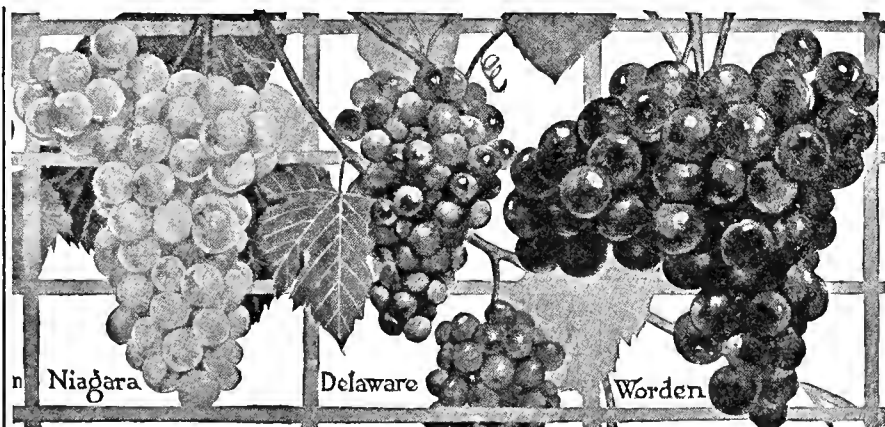
HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.
147 Summer St. Boston, Mass.



T. S. HUBBARD CO.
Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting

Established 1866

Send for Catalogue

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobalan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades, also
Grape and Currant Cuttings and Light Grade of Vines for
Lining Out in Nursery Rows
WRITE FOR PRICES

F. E. Schifferli, Fredonia, N. Y.

HARDY PERENNIAL PLANTS

Phlox, Iris, Delphiniums, Shasta Daisies and many other perennials. Send us your want list for prices or ask us for wholesale price-list.

WILLIAM TOOLE & SON,
Hardy Plant & Pansy Farm,

Baraboo

Wisconsin

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing
Ask for Prices. We are the printers of this Magazine

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

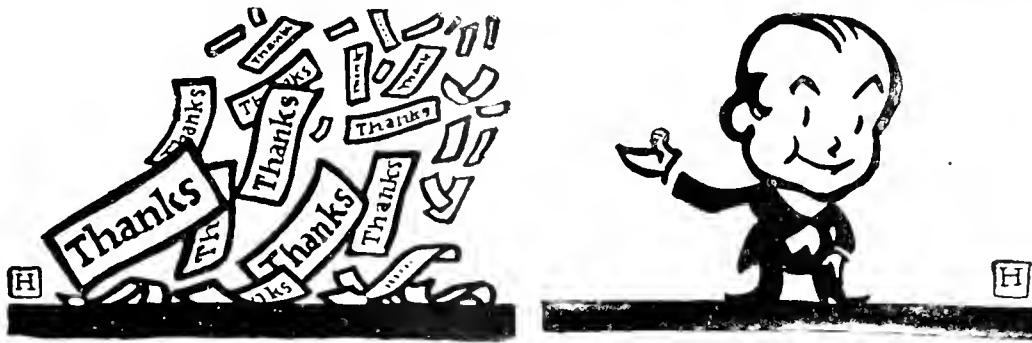
Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.



Thanks Are Good As Far As They Go But They Don't Pay Expenses

Supposing a lot of us fellows had gathered together and come over to your Nursery when help was scarce, and done a lot of cultivating for you.

Suppose then, because of this extra cultivation, your stock was better, sold better, and brought better prices; wouldn't you kind of feel like kind of thanking us?

Well, sir, that's exactly what has happened and is happening.

The Service Bureau months ago, started articles going in hundreds of papers, cultivating business prospects for Nurserymen.

Thousands and thousands of buyers have been literally bombarded week after week with live articles on—What to plant; How to plant; and When to plant Nursery Stock.

And they have planted.

And you have had a kind of business that you never had before. Never had it, because those folks had never before been so thoroughly waked up to the idea of planting.

Where did that business come from?

Your advertising did not dig up all of it.

The war being over, isn't responsible for the rest of it.

You know, and we know, that the nation-wide "edu-

cational" Publicity Campaign that The Nurserymen's National Service Bureau has been conducting, is largely responsible for it.

It has cultivated business for you.

And so, that's why a lot of you write us your thanks. You "congratulate us on the good work, and deeply hope it will go on."

Which is all very fine, and we appreciate it greatly. But it doesn't pay expenses.

Of course, it takes money to keep this good work going. And if it's good enough to send thanks for, it's good enough to support.

Isn't it good business to put back into the Market Development Campaign part of the extra profit, Market Development has made for you this Spring?

Tell Treasurer E. S. Welch, of Shenandoah, Iowa, how much you will chip in.

A subscription to the Market Development Fund will do more honest-to-goodness thanking than anything else you or I know of.

Say it with a check!

Manager.

P. S. Is your home paper using our business-building articles for busy people? Send us a list of papers in the territory you sell in, or have sold in.

NURSEYMEN'S NATIONAL SERVICE BUREAU

220 West 42nd Street



New York City

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials.

Send us your want list.

Inspect our stock.

The

Established 1841

Gardeners' Chronicle

is the Leading Horticultural Journal in the World

SUBSCRIPTION IN U.S.A., \$4.20
YEARLY POST FREE

Specimen Copy and Catalogue of Horticultural Books post free on application to the publisher----

The Publishers, 41 Wellington St.
Covent Garden, LONDON, W.C.



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address
The Florists' Exchange, P. O. Box 100, Times Square Sta.

A Large Stock of Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES and SHRUBS. All stock clean and thrifty, the best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1919

Apple, 2 year, fine Ben Davis, Black Ben Davis, Gano, Delicious, Lowry, Rome Beauty; Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; Evergreens—Norway and Hemlock Spruce, Deodar Cedars, Irish Junipers, California Privet, 2, 3, and 4 year; Sugar Maple Seedlings, six inches to ten feet.

Write us for prices.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries
Raspberries
Blackberries
Dewberries
Berberry

Currants
Gooseberries
Grape Vines
Privet
Spirea

Rhubarb
Asparagus
Horseradish
Hardwood Cuttings
Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE OHIO

W. FROMOW & SONS

Rhododendrons, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES
Surrey, - - - England

We sell to THE TRADE only, and make a specialty of

OREGON CHAMPION GOOSEBERRY PERFECTION CURRANT CLEAN COAST GROWN SEEDLINGS

We also have growing for fall delivery a large assortment of general nursery stock, including Fruit, Shade, and Ornamental trees, Roses, Etc.

Head Quarters for Nursery Supplies.

Correspondence invited.

Portland Wholesale Nursery Co.

122 1/2 Grand Avenue, Portland, Oregon

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries
North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.



NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and

PRINTED IN ANY MANNER that may be called for

Prices as low as First-Class Work and Unequaled Promptness in

Delivery will justify.

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

CAROLINA PEACH SEED

On further investigation we find that the crop has been damaged by two recent cold spells, and today (April 28) indications are that the crop will be very light. Unable to determine the price at this time; we suggest that you place order for whatever your requirements are and the matter of price can be adjusted later.

1918 seed can be shipped promptly; we have them in storage. Price on application.

Yours for a Beautiful and Fruitful America,

J. Van LINDLEY NURSERY CO.
Pomona, N. C.

Subscribers to Market Development Fund.

RAFFIA

SMALL SHIPMENT just received

Containing Our Usual Brands

Order at once before supply is exhausted

Thomas B. Meehan Co.

DIRECT IMPORTERS

Dresher, : : : Penna.

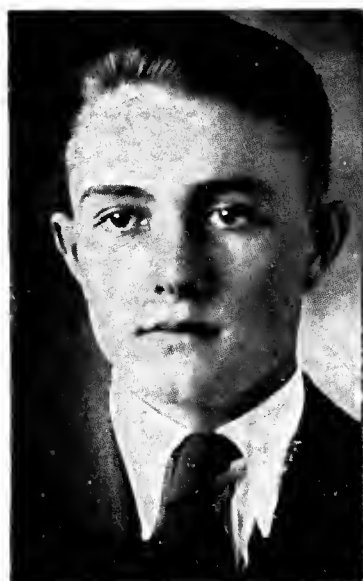
MEET US AT THE CONVENTION



Orlando Harrison



G. Hale Harrison



Henry L. Harrison



George A. Harrison

NURSEYRMEN

ORCHARDISTS

BADGE NO. 2

We will gladly give you any information you may desire about our present stocks and prices. You will find it worth your while to look us up.

A partial list of what we will have to offer you:

APPLE TREES—TWO YEAR, BUDDED

Alexander	Red Astrachan
Ben Davis	R. I. Greening
Fameuse	Stark
Gravenstein	Tompkins King
Grimes	Wagner
Gano	Winter Banana
Horse	Wolf River
Jonathan	Yellow Newtown
Northern Spy	

APPLE TREES—ONE YEAR, BUDDED

Baldwin	Paragon
Ben Davis	R. I. Greening
Delicious	Rome Beauty
Gano	Stayman
Gravenstein	Wealthy
Grimes	Williams
Jonathan	Winter Banana
McIntosh	Winesap
Northern Spy	Yellow Transparent
Northwestern	York Imperial
Oldenburg	

PEACH TREES—ONE-YEAR, BUDDED

Belle of Georgia	Hiley
Brackett	Iron Mountain
Carman	Krummel
Champion	Late Crawford
Early Wheeler	Levy
Elberta	Mamie Ross
Fox	Mayflower
Francis	Ray
Greensboro	Rochester
Hale	Salway
Heath	Slappey

MAPLE, NORWAY

5000	8 to 10 ft., 1¼ to 1½ in.
6000	10 to 12 ft., 1½ to 1¾ in.
7000	12 to 14 ft., 1¾ to 2 in.
8000	14 to 16 ft., 2 to 2½ in.
9000	2½ to 3 in.
8000	3 to 3½ in.
3000	3½ to 4 in.
1000	4 inch.

HEDGE PLANTS

California Privet

5000	12 to 18 in.
5000	18 to 24 in.
5000	2 to 3 ft.
7000	3 to 4 ft.
8000	4 to 5 ft.
9000	5 to 6 ft.

SPECIMENS

2000	5 to 6 ft. high, 3 ft. broad
------	------------------------------

BARBERRY, THUNBERGII

8000	6 to 12 in.
9000	12 to 18 in.
10000	18 to 24 in.
8000	2 to 3 ft.
3000	2½ to 3 ft.

HARRISONS' NURSERIES,

Nurserymen Orchardists

BERLIN, MARYLAND

Subscribers to "Nurserymen's Fund for Market Development."

Press of Robinson Publishing Company, Hatboro, Penna.



THE NATIONAL NURSERYMAN



JUNE 1919

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large assortment of high quality Nursery
Stock for the Wholesale Trade.

Fruit Trees, Small Fruits, Ornamental Trees,
Shrubs, Roses, and Vines.

A FINE LOT OF

Elm, American White, all sizes

Wanted — Hansen Hybrid Plums and Compass

Ask for Trade Lists. Write us about your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants

Everbearing and Standard

From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company

Strawberry Specialists,

Salisbury, - Maryland

To the Trade:

**Our Mr. Burr hopes
to meet you at
Chicago.**



C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

The REWARD of SERVICE *--is more service*

and we have been handsomely rewarded the past season by having our business score an increase of nearly 35% over any previous year. We like to believe that a substantial part of this gratifying increase comes because our good friends have been pleased with the service and quality of stock we have furnished them.

For 1919-1920 we count upon retaining all our present customers for "J and P Preferred Stock" and gaining many additional ones. We shall have our usual good assortments and we especially solicit inquiries for the following lines:

ROSES	CLEMATIS PANICULATA
	AMELOPSIS VEITCHII
LARGE-FLOWERING CLEMATIS	PAEONIAS
PERENNIAL PLANTS	FLOWERING SHRUBS
ORNAMENTAL TREES	CURRENTS
LILACS, tree-form and bush	GOOSEBERRIES
EVERGREENS	FRUIT TREES

Please use printed stationery, or enclose business card, when writing for prices, if unknown to us. We sell to the trade only.

Jackson & Perkins Company

Newark, - New York

The
Preferred
Stock

The
Preferred
Stock

Evergreens

Suitable for June Delivery

Abies, Douglassi, 3 to 4 feet.

Picea Alba, 3 to 4 feet.

" Excelsa, 2 to 3 feet.

" " 3 to 4 feet.

Retinispora Picifera, 3 to 4 feet.

" " Aurea, 3 to 4 feet.

" Plumosa, 2 to 2½ feet.

" " Aurea, 2 to 2½ ft.

Thuja Columbia, 3 feet.

" Compacta, 12 to 15 inches broad.

" Ellwangeriana, 3 feet.

" Hoveyi, 18 to 24 inches.

" Siberica, 18 inches.

" " Lutescens, 24 inches.

Compact, well grown plants.

W. B. COLE

PAINESVILLE, OHIO

J. H. Skinner & Co.

Topeka, - Kansas



Japan Pear Seedlings.

Russian Apricot Seedlings.

Forest Tree Seedlings—Catalpa, Maple, and Locust.

Fruit Trees—Apple, Cherry, Kieffer Pear, Peach and Plum.

Rhubarb, Divided Roots, True Myatt's Linneaus.

Grapes

Shade Trees

Flowering Shrubs

Paeonias



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

==

THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

When writing to Advertisers please mention the National Nurseryman.

PAINESVILLE NURSERIES



Better Pear Trees Than Ours, Cannot be Grown

*Our representative will tell
you all about it at Chicago*

THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

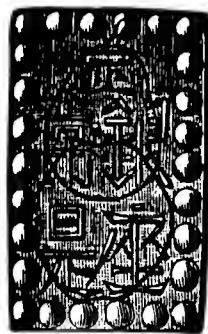
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX

and
HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

73 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

*Our usual general assortment
of Nursery Stock to offer
for Fall 1919*

APPLE
PEACH
CHERRY
PLUM
SHRUBS
VINES, Etc.

Head quarters for Norway Maple
and American Elm.

C. M. Hobbs & Sons
Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."



WE HAVE BEEN PERSUADING SIX MILLION PEOPLE TO BUY YOUR STOCK

BEEN doing it day and night, every week for months.

Been doing it in a way that has made them open up their pocket-books, and plant more than ever before.

That's where some of your new business came from this Spring—there is no denying that.

How did we do it for you?

By talking into the ears of over six million buyers. Talking when they had time to listen, when

sitting around the table, evenings.

Talking to them through their own home papers—750 of them—and the list is still growing. Papers that are read from front to back, just as you read *your* home paper.

This is just one small part of what can be done to increase business for all you Nurserymen, when you organize to do the job as you know it should be done.

Do you want to know what some of the other really big things are? Then come to the

Chicago Meeting

At 2.30, Tuesday, June 24th, in the Hotel Sherman, the subscribers to the Market Development Fund will meet. Non-Subscribers are cordially invited to meet with us.

At this Meeting, we will outline a detailed program for the coming year, including one of the biggest business-building campaigns ever put across by any industry, anywhere.

This sounds like a big brag—It's not.

Come and see for yourself.

Be at Chicago!

Follow the little blue tags, and "get in right."

Hoping to meet you there.

Manager.

NURSERYMEN'S NATIONAL SERVICE BUREAU

220 West 42nd Street



New York City

When writing to Advertisers please mention the National Nurseryman.

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

We are pleased to offer for Spring or Fall:

CHERRY, 2 year X X 1 inch up, also $\frac{3}{4}$, $\frac{5}{8}$ and lighter grades.

CHERRY, One year $1\frac{1}{16}$ up, $\frac{5}{8}$ & $\frac{1}{2}$ to $\frac{5}{8}$

Our Blocks of Cherry are largest to be found in U. S.

We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment.

Grafted Hardy Northern Pecans.

Car Lots a specialty, also fair assortment of Ornamentals.

Subscribers to "Nurserymen's Fund for Market Development."

FAIRFIELD NURSERIES
FRUIT AND SEED FARMS

I have sold all the stock I will have this Spring, but this Summer I will be ready to book orders for Fall, 1919 and Spring 1920 delivery.

The war is over and good times are ahead. No more guns or ammunition will be needed, but you will want more of my Grape Vines, Scarlet and Crimson clover and Cow-Peas than ever before.

Keep me in mind.

CHAS. M. PETERS

P. O. Address Salisbury, Wicomico County, Maryland.
Long Distance 'Phone and telegraph, Salisbury, Maryland.

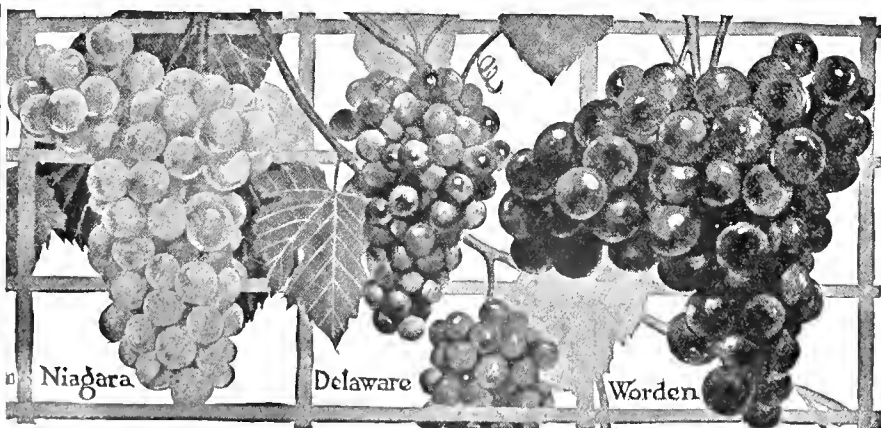
Grootendorst's Dutch Bulbs

supplement your offerings of trees and shrubs for beautiful home grounds; your customers will appreciate the opportunity of securing from one firm and on one order all the planting material required.

**You Should Reserve Your
Estimated Supply Now**

Present indications point to a serious shortage of Dutch Bulbs. We can only book a limited number of orders, therefore write us at once. Send for wholesale list, if you do not have it.

F. J. Grootendorst & Sons
2 Stone St., New York City



T. S. HUBBARD CO.
Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting
Established 1866

Send for Catalogue

When writing to Advertisers please mention the National Nurseryman.

Hill's Evergreens

SINCE 1855

Complete stock of leading varieties in Firs, Spruce, Pines, Arborvitae's, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

The D. Hill Nursery Co., Inc.

Evergreen Specialists.

Largest Growers in America.

Box 401, Dundee, Illinois

THE WESTMINSTER NURSERY
J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Fall 1919

250,000 Cal. Privets in grades, 1, 2, and 3 yrs.

300,000 Asparagus, 2 and 3 yr., Asst.

Barberry Thun., 18-24 in. and 2-3 ft.

Lombardy Poplars in grades 6 to 16 ft.

Oriental Planes in grades 6 to 12 ft.

Tulip Poplars, 6-8 ft.

Horse Chestnuts in grades 7 to 12 ft.

Catalpa Speco in grades 8 to 12 ft.

Butter Nuts 4 to 8 ft., in grades.

Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft.,
Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft.
and 4-5 ft., Hydrangeas P. G., 2-3 ft. Write for Prices.

**We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

FALL 1919—SPRING 1920

STRAWBERRY PLANTS

All of the best Standard and Everbearing varieties, we will ship to you, or direct to your customers under your tag. Plants guaranteed strictly first class and true to-name, all New Land grown. We tie in bundles of 26 for 25 and pack in ventilated boxes with damp moss. If you need 100 or 1,000, 000 strawberry plants get in touch with us in regards to supply before we book our entire stock.

We are located in the largest strawberry center in the world and have the soil and climate to produce the best in strawberry plants.

From Connecticut

Gentlemen: We wish to thank you for your prompt handling of our spring strawberry orders, and assure you that your services are very much appreciated.

From Pennsylvania

Dear Sirs: Your shipment of the 21st arrived in due time and everything is satisfactory. I admire your careful packing. Will in a few days forward you another large order.

We also offer a good stock of asparagus roots 1 and 2 year, grape vines 1 year, California Privet 1 year, Barberry T. 2, 3 and 4 year, Silver Maples all sizes from 6 to 12 feet, Flowering shrubs and Evergreens.

Let Us Price Your Wants.

We are in the market for peach, plum and cherry trees, what have you to offer

Bunting Nurseries,

G. E. BUNTING & SONS
Selbyville—Delaware



List and Prices Ready Season - 1920

If interested mail business card or letter head. We want you on our mailing list.

HOWARD ROSE CO., Hemet, Cal.

HARDY PERENNIAL PLANTS

Phlox, Iris, Delphiniums, Shasta Daisies and many other perennials. Send us your want list for prices or ask us for wholesale price-list.

WILLIAM TOOLE & SON,
Hardy Plant & Pansy Farm,

Baraboo

Wisconsin

Get Bigger and Better Mail Returns From Your NURSERY CATALOGS

by having them profusely illustrated and well printed. Use the colors of nature on the covers. To accomplish this, place your printing order in the hands of nursery catalog and color printing specialists who will plan your catalog, furnish all the illustrations and color plates, and charge but a fair price for the printing. Now is the time to place your order, as our capacity has its limits. Write right now. Estimates and dummies furnished without any obligation incurred.

CAMPBELL-JOHNSON PRINTING CO.
Tenth and Walnut Streets - - DES MOINES, IOWA
PRINTERS TO THE NURSERYMEN OF AMERICA

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

The Denney Tag Co.

West Chester, Pennsylvania

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

PRINTING

Catalogues

Stationery

Business Forms



The Robinson

Publishing Co.

Hatboro, Pa.

Specialists in Nursery Printing

Ask for Prices.

We are the printers of this Magazine

IBOLIUM THE NEW HYBRID

To be sent out in Fall 1919.
THE ELM CITY NURSERY CO.

HARDY PRIVET

More about it later.
Woodmont Nurseries, Inc.

(L. Ibota x Ovalifolium)

Introducers of BOX-BARBERRY
NEW HAVEN, CONN.

When writing to Advertisers please mention the National Nurseryman.

Report on "Princeton Products"

Forty-three bulk car-loads;
 Hundreds of L. C. L. and Express shipments;
 One truck delivering to nearby Nurserymen every day.
 That's what we did in Spring 1919.

Considering that we started three years ago with Zero Customers, and our first two seasons in war-times, we are a little proud of this, our third selling season.

Three Hundred Eighty-Seven Customers in Twenty-Seven States and Canada have used our dug-to-order "Products" this Spring.

We are campaigning for 387 New Customers this coming season. We want 387 discriminating buyers of Nursery Stock to investigate and try out "Princeton Products": Buyers who want stock that carries with it something besides height and caliper.

Our largest crops both in quantity and assortment come off this Fall and Spring 1920, as our heaviest plantings were made during the past two and three years. It's all clean, healthy, well-developed stock, properly grown and cared for—no war-relics, cut-backs nor hold-overs.

You're going to be a buyer this year—You are going to need more stock than you ever used before, if we read the times right. Make it a point to come and see us at Princeton, write us, or talk to us at the Convention this month.

Princeton Nurseries

Princeton - New Jersey

June First, Nineteen-nineteen.

To Edge An Avenue

trees should be used which grow uniformly and furnish impenetrable shade. The trees best suited to this purpose—they have proved it time after time—are genuine Swan River

Norway Maples

You need never fear a "come back" when you recommend and sell our trees for this or any other use. We have grown them, we are proud of them, and justly proud. They caliper from 1 to 3½ inches; their heads are shapely, their trunks straight and fine. We can deliver by motor truck within fifty miles of New York City. Just let us know how many you can use.

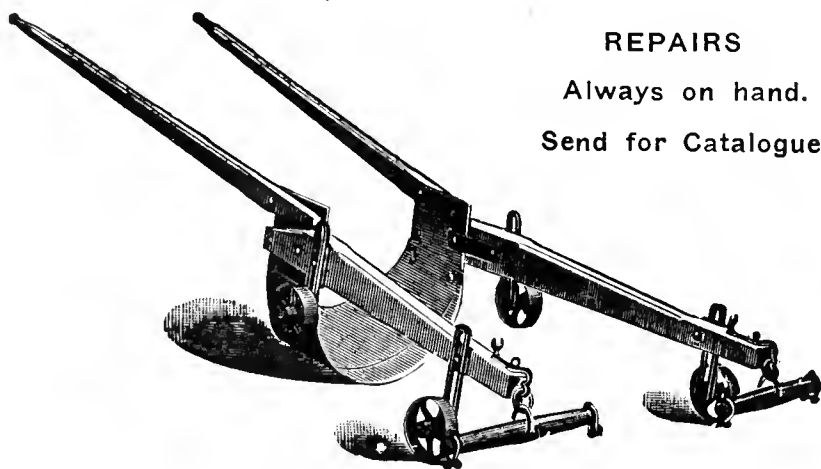


Swan River Nurseries, Patchogue, N.Y.

1857

1919

BRAGG'S COMMON SENSE TREE DIGGER



REPAIRS
 Always on hand.
 Send for Catalogue

Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.

KALAMAZOO, MICH.

Ornamental Nursery Stock

TREES, SHRUBS, EVERGREENS,
 VINES and HERBACEOUS PLANTS

Large assortment. Long list of varieties and sizes.
 Get our New Trade Catalogue,—ready now.

Fall price list out of date.

Thomas B. Meehan Co.

WHOLESALE NURSERYMEN,

DRESHER

PA.

CHAMPION NURSERIES, Perry, Ohio

Offer the Following Stock

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6. to 8 ft., 8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4 ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet, California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

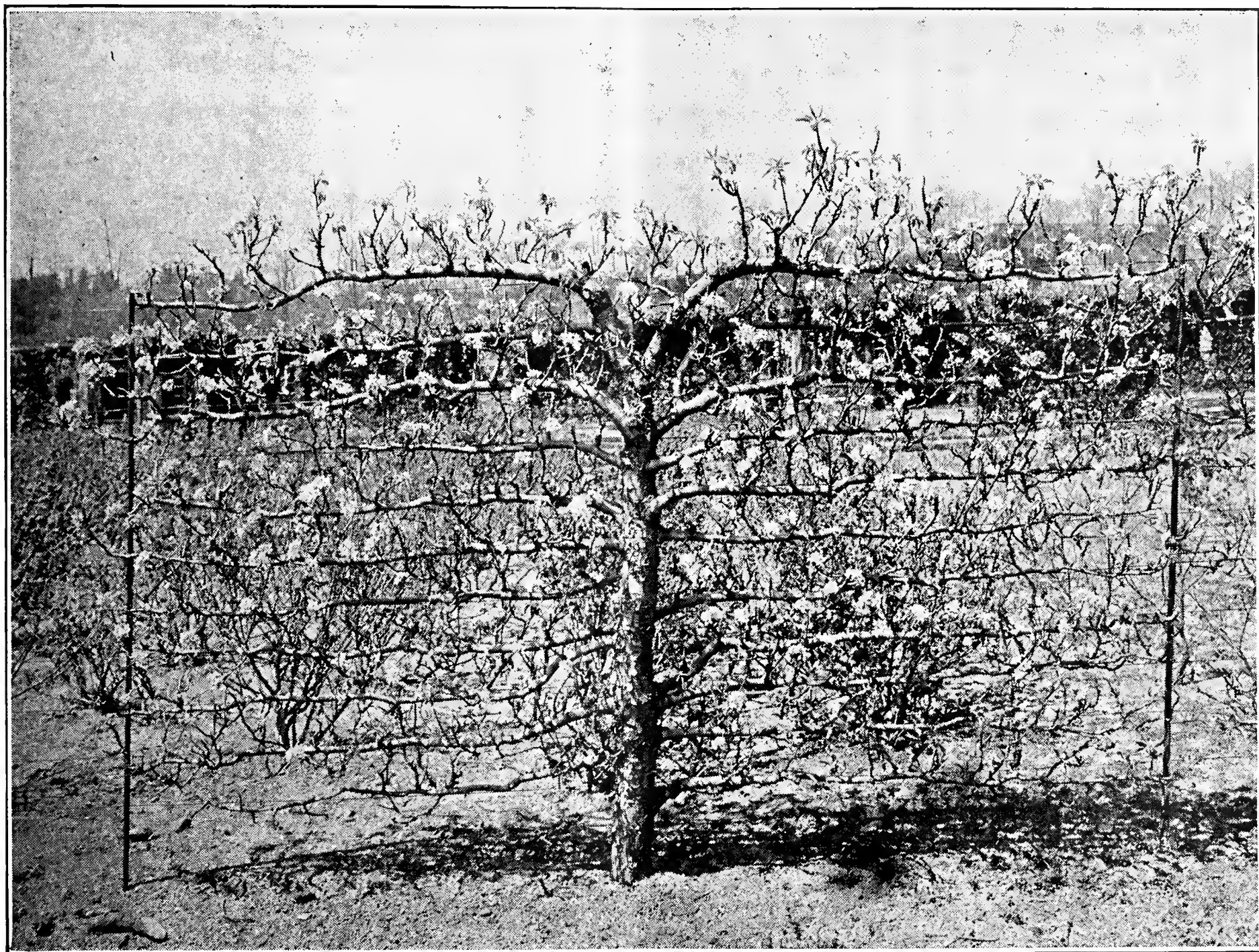
FOR GROWERS AND DEALERS IN NURSERYSTOCK
The National Nurseryman Publishing Co., Incorporated

Vol. XXVII.

HATBORO, PENNA. JUNE, 1919

No. 6

TRAINED FRUIT TREES



A Well Trained Espalier Apple Tree

Well cared for trained fruit trees are the ear marks of a good garden. It is generally recognized among high grade private gardeners, that if the trained wall fruits, espaliers, pyramids and cordons were in good shape, practically everything else under the gardener's care would be.

While their care is very simple, it has to be learnt, only the skilled gardener who is a craftsman knows how to do it.

It is amusing or tragic, whichever way you look at it, to note the returning visitor from the gardens of Europe, full of enthusiasm about the wonderful trained fruit-trees, buy imported trees and see them die or run wild.

While it is not quite so easy to keep them in good condition under the climatic conditions of America as it is

in Europe, the possibilities have been demonstrated beyond all question, and what is more interesting a very able gardener, who was eminently successful in growing and fruiting dwarf and trained fruit expressed the opinion that it was possible to grow them so as to be commercially profitable.

There is a tremendous field for the enterprising nurseryman, along this line awaiting development but it is not likely to be one that will give quick results, but everyone knows who has had anything to do with the American buying public the nurseryman could name his own price if he could show his customers dwarf and trained fruit trees in bearing and in condition to be successfully transplanted at the proper season and instruct the purchaser how to care for them.

The Forty Fourth Annual Convention

The Forty-fourth Annual Convention of the National Association of Nurserymen will be held June 26th, 27th, and 28th at Chicago, Illinois. Headquarters will be the same as last year at the Hotel Sherman

There is every indication this meeting will be the most important ever held and that it will vitally affect the future policy of the Association and incidentally the nursery business of the country.

All members who possibly can should attend.

PROGRAMME

AMERICAN ASSOCIATION OF NURSERYMEN

HOTEL SHERMAN

CHICAGO, ILLINOIS.

June 25-27, 1919

WEDNESDAY, JUNE 25th, 9:00 A. M.

Call to Order by President.

Invocation—Rev. G. L. Robinson, D. D.,
of McCormick Seminary, Chicago, Illinois.

Address of Welcome—Wm. R. Moss,
of Chicago Association of Commerce, Chicago, Illinois.

Response—M. R. Cashman, Owatonna, Minnesota.

President's Address—Pres. J. R. Mayhew,
Waxahachie, Texas.

Announcement Committee on Arrangements—
Alvin E. Nelson, Chicago, Illinois.

WEDNESDAY, JUNE 25th, 2:00 P. M. (EXECUTIVE SESSION)

Report of Committee on Policy.

THURSDAY, JUNE 26th, 9:00 A. M.

"The Propagation and Growing of the Rose"—
E. G. Hill, Richmond, Indiana.

"The Propagation and Growing of Ornamental Stock"—
Robert George, Painesville, Ohio.

"The Growing and Preparation of Evergreens for Land-
scape Planting"—Charles L. Seybold, Forester
Department of Parks, Wilkes-Barre, Pennsylvania.

"The Nurseryman's Opportunity in Reconstruction"—
Dr. A. F. Woods, President Maryland State College
of Agriculture, College Park, Maryland.

THURSDAY, JUNE 26th, 2:00 P. M. (EXECUTIVE SESSION)

Reports of Committees:

Press and Publicity—Ralph T. Oleott, Rochester, N. Y.

Secretary—Charles Sizemore, Louisiana, Mo.

Counsel—Curtis Nye Smith, Boston, Mass.

Legislative—Orlando Harrison, Berlin, Md.

Distribution and Directory—

M. R. Cashman, Owatonna, Minn.

Statistical—Henry B. Chase, Chase, Alabama.

Standardization—Harlan P. Kelsey, Salem, Mass.

Arbitration—Jno. S. Kerr, Sherman, Texas.

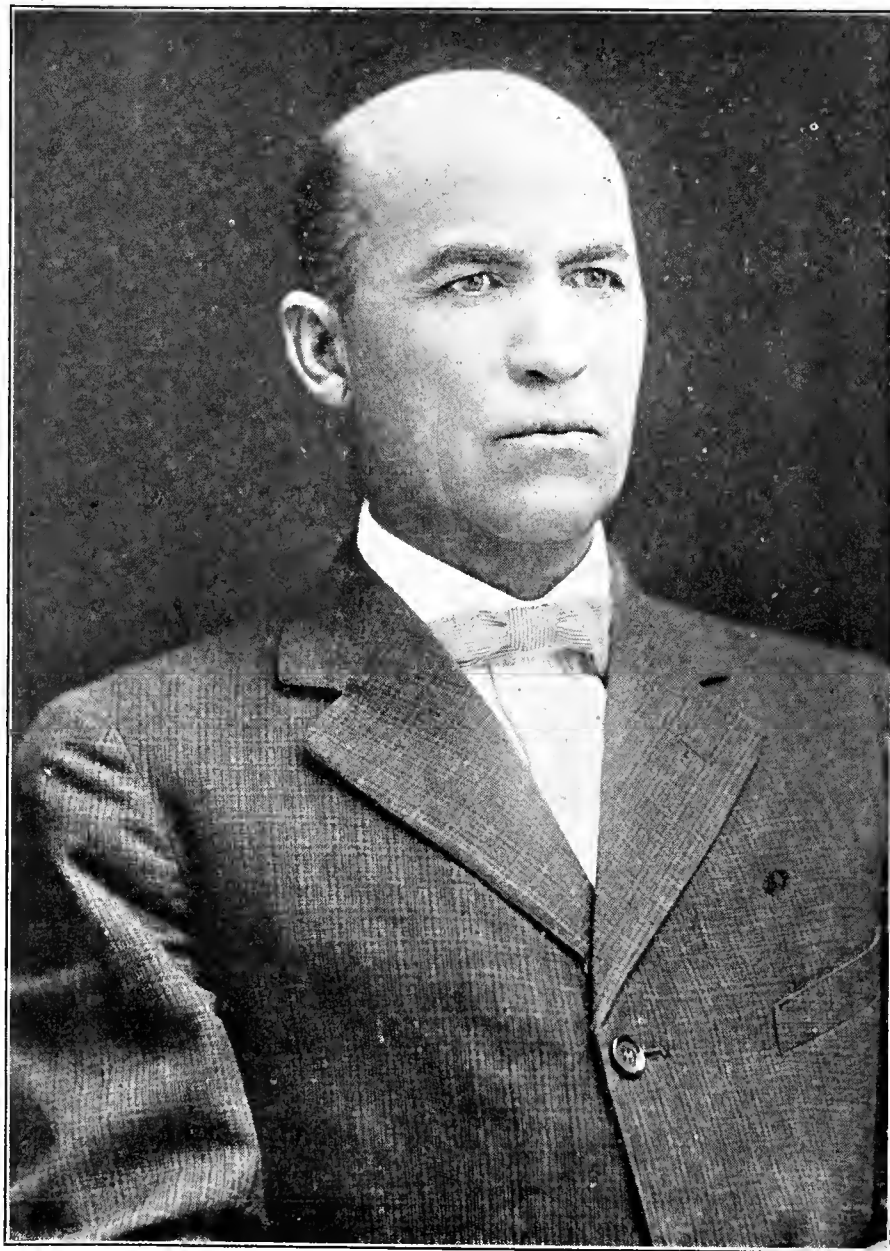
Tariff—Theo. J. Smith, Geneva, N. Y.

Hail Insurance—F. A. Weber, Nursery, Mo.

Landscape Architects—Thos. B. Meehan, Dresher, Pa.

Nomenclature—J. Horace McFarland, Harrisburg, Pa.

Vigilance—Paul C. Stark, Louisiana, Mo.



J. R. MAYHEW, Waxahachie, Texas,
President of the American Association of Nurserymen

Exhibits—Alvin E. Nelson, Chicago, Ill.

THURSDAY, JUNE 26th, 8:00 P. M.

Meeting of State Vice Presidents.

FRIDAY, JUNE 27th, 9:00 A. M.

Report of Subscriber's Organization for Market Develop-
ment.

FRIDAY, JUNE 27th, 2:00 P. M.

Report of State Vice Presidents.

Election of Officers.

Selection of Next Place of Meeting.

Unfinished Business.

Song—"America."

Adjournment.

Let the Slogan be "Forward"

In 1915 when the American Association convened at Detroit, there was a universal feeling among the membership that something was radically wrong, and that it was up to that particular convention to "do something." As we all remember, plans were inaugurated and adopted which completely reorganized the Association and which, with amendments from time to time since, have given us a fairly creditable business organization. No greater proof is necessary that our action at Detroit in 1915 was wise than the results. Every business that I know anything about is in much better condition financially to-day than then. Nurserymen have made money

results. If there is \$100.00 in service given for \$100.00 in dues collected, that member is decidedly better served and better satisfied than if \$5.00 in service was given for \$5.00 in dues collected.

Now, it is very natural that on the part of a few there is a question in all this, and a disposition to revert to old methods, but to my mind such a thing is unthinkable. We had "the flesh pots back there in Egypt," were we satisfied? In 1915 in talking over the depressed condition of the nursery business generally with one of my friends, I said to him, "if it is impossible to work out some plans co-operatively for a better condition in the



J. W. HILL, Des Moines, Iowa,
Treasurer of the
American Association of Nurserymen



CHARLES SIZEMORE, Louisiana, Mo.
Secretary and Traffic Manager of the
National Association of Nurserymen

the past few years, and if we act with reasonable discretion the next few years should be the most profitable in the experience of most of us. The business of to-day is being operated upon a higher plane than ever before, and there is not a thinking man among us but that knows this is true. To be sure, we have not as yet accomplished all that is desired, and we never will. A hundred years hence those who follow after us will find a work to do, and they should, but the point I am making is that we are making progress. We have demonstrated, I believe, beyond a reasonable doubt, the efficacy of a business organization. We have demonstrated that co-operation, at least in degree, is possible among nurserymen, and as we learn, as we must, that we are friends and not enemies, the spirit of co-operation will develop. We have demonstrated that the membership is not adverse to paying advanced dues, evidenced by the fact that our roster continues to grow. What the membership of A. A. of N. wants is

nursery business. I am determined to liquidate my business," and I meant every word of it. We have made a good start, and if we go forward with the work begun, I see no reason why our particular line should not be as profitable as any other commercial undertaking.

HISTORY WILL REPEAT ITSELF

"Why spend money promoting the development of market when there is not stock sufficient to supply the already present demand?" Well, suppose that to be true as it relates to this particular year, how long will it be before the country will again be flooded with stock which, if not marketed, will bankrupt us? If we fail now, this very year, to provide a competent business organization to cope with conditions that will certainly come, how can we escape severe punishment?

THE 1919 CONVENTION

(A word personally)

On June 25th, at 9.30 a. m., the Forty-fourth annual convention of the A. A. of N. will be called to order in

Chicago at Hotel Sherman. Five hundred of the leaders in American Horticulture should be in attendance on this occasion. We should every one of us go there determined to put something into this convention, and if we do we will get something out of this meeting. This is going to be a business meeting, and there will be something doing every hour of the three days. Furthermore, it is your meeting. Not only should it be your pleasure to be present, but it is your duty. There will be a report from a special committee on Association policy that you can't afford to miss. This committee will endeavor to recommend to the convention a policy of standardization which should be far reaching in its effects. Don't miss this

report. The Executive Committee has collected and disbursed your funds for a year and will render account of their stewardship, you should be there to approve or disapprove their action and direct their future course. And if you are on the job with your eyes open and your ear to the ground, you should be there determined that the future of American Association of Nurserymen shall be FORWARD.

I expect to see you in Chicago, June 25th.

Yours for a great meeting,

J. R. MAYHEW, *President.*

Waxahachie, Texas, May 10th, 1919.

The Yeast is Beginning to Work

National Service Bureau Publicity Campaign Showing Results. More Nurserymen should take advantage of Syndicated Articles and Lecture Service.

"Does general educational publicity build business?"

"Yes, it does—and we can prove it" says Manager Rockwell of the Nurserymen's National Service Bureau. "You don't have to take my word for it, however. Just consider the following facts:

"Every time anyone suggests National Publicity for nurserymen and mentions, as an argument in favor of it, what the California Fruit Growers, or some other association, has done, somebody in the back row is seen to rise up and say:

"Yes,—yes. But our proposition is different. You can't standardize nursery stock. And without standardization publicity ain't worth a Tinker's Tink!"

"Well, let's see about that. Let's take the things nearest akin to the nursery trade—seeds and flowers. (And, incidentally nobody has ever succeeded in standardizing seeds or flowers!)

"If you know any seedmen at all, you know what the demand for vegetable seeds has been this last three years. Last year it ran way ahead of the year before; this year, according to a survey just completed by the Seed World, 40 per cent of the retail seed houses report sales running ahead of last year, notwithstanding greatly increased prices. Mr. Paek, President of the National War Garden Commission, told me the other day that they estimated from their field agents' reports, a very substantial increase in the number of home gardens this year—although the war is over.

"WHY?

"Any seedsman will tell you that the PUBLICITY given to home gardening by the National War Garden Commission and the Department of Agriculture has helped tremendously the sales of vegetable seeds. The point of greatest interest is: the demand has kept up even after the war stimulus has ceased!

"And as to flowers: certainly they cannot be standardized. They are, compared to either vegetables or nursery stock, a luxury. But last year, with the war still on,

and Red Cross and War Chest Campaigns being pushed, business in flowers increased!

"WHY?

"Well, the leading florists of the country are satisfied that the increase was due to their publicity campaign. That they are not merely talking when they say that is proved by the fact that they are putting up more money this year than they did last year for the publicity campaign, although the war is over. And when a man talks with a check, he means what he says.

"And this year, although prices are higher than they have been for several years, nurserymen have found a bigger demand for their product than ever before.

"Again, why?

"Again, the answer is PUBLICITY. The work of the nurserymen's National Service Bureau was not started until the beginning of this year, but for weeks past prospective planters have been urged by the series of educational articles which the Bureau has supplied to over 500 especially selected newspapers throughout the eastern and mid-western states, TO PLANT. Over a million and a half prospective buyers have been told the advantages of PLANTING, have had suggested to them WHAT TO PLANT, and have been instructed HOW TO PLANT for successful results; they have been helped in the care of the things they have already planted—and in the proportion that they succeed with whatever they have already planted they will plant other things.

"Read carefully the letter above from Mr. Charles Dexter Allen, Manager of the Service Division of the Independent.

"When Mr. Allen asked me for a list of nurserymen who could be recommended he did not know that any publicity had been carried on by the nurserymen. He did not know that I was connected in any way with the nursery industry. But he DID know, as his letter states, that the magazine with which he is connected, and which has a large country circulation, had been receiving a NOTICEABLE INCREASE in the number of inquiries regarding where certain trees, shrubs and ornamentals could be obtained. Of course, the work of the Nurserymen's

National Service Bureau is still a very small beginning, but if the little we have done so far has shown results so noticeable, can any nurseryman who is at all familiar with the part publicity plays in modern merchandising have any doubt that at least a small part of his advertising appropriation can be expended more effectually in a co-operative campaign for general publicity than in individual effort?

"No nursery concern in the country, at no matter what expense, could possibly have obtained the publicity which the Service Bureau has been able to get. If paid for at advertising rates it would have cost tens of thousands of dollars,—but it could not have been bought at any price.

EVIDENCE

From a letter to F. F. Rockwell from Charles Dexter Allen, Manager Reader's Service of the Independent and Harper's Weekly.

"We have had recently an increased number of inquiries about the planting of trees and shrubs. These inquiries, without exception ask for names and addresses of dependable nurserymen, growers, dealers and seedsmen of whom they can buy.

"When we have an inquiry from the Northwestern or the Southeastern, the Central or the Southern portions of the United States regarding trees, shrubs and plants, we would like in answering, to give the address of a reliable nursery in the general location from which our correspondent writes.

"It would be a manifest convenience to him to be

able to order goods from a nursery fairly close at hand.

"Do you know if a directory of nurserymen can be had? If you make a recommendation we shall appreciate the courtesy.

Very truly yours,
INDEPENDENT EFFICIENCY SERVICE,
Chas. Dexter Allen, Manager.

April 25th, 1919."

DOES PUBLICITY PAY?

Three years ago the National War Garden Commission and the Department of Agriculture started a publicity campaign on

VEGETABLES:—

SEED sales jumped! The SEEDSMEN have had the three biggest years in their history.

Two years ago the *Florists* started their publicity campaign on

FLOWERS:—

Flower sales jumped! In spite of adverse conditions, business increased so much last year that many florists this year are *doubling* their subscriptions to the Publicity Fund.

This year the *nurserymen*, through the national Service Bureau, started their publicity campaign on

NURSERY STOCK:—

Nursery sales jumped! Nurserymen have had all the business they could do—at higher prices.

DOES PUBLICITY PAY?

A SUGGESTION FOR STABILIZING PRICES

Why not eliminate the trade price list completely and in its place publish the retail selling price in every possible way, standardizing grades and qualities and then the individual nurseryman could send his discount sheet to those entitled to it?

To the trade, jobbers, quantity consumers, landscape gardeners, florists or all those that are entitled to it for some reason or other.

The discount need not be the same to the quantity consumer as to the trade.

While perhaps this suggestion would not be a cure-all for the present chaotic state, it would be backing up the Market Development Movement and be a great advance towards stabilizing prices, and in bringing about a more equitable arrangement between the grower, middleman and consumer.

In fixing the retail price it should be based as near as possible on the average known cost of production and about three and one-half times greater.

Assuming the cost of growing an apple tree 2 year XX grade is 20 cents, the retail price would be 70 cents.

The element of labor, risk, etc., that enters so largely into the cost of handling a living plant when out of the ground explains the big difference between the cost of

production and price to the consumer, add to this fact the manufacturer, grower or producer is often his own distributor and you have the real cause of unstable and low prices.

THE LABOR QUESTION

The labor question is a serious matter and likely to remain so for some time, not only the transient help that is put on for the rush season, but the steady help, that is depended upon to learn the work and act as foremen.

The experience of a large nursery in the east illustrates the attitude of the average man towards nursery work.

Advertisements were put in the local papers for married men to learn the nursery business. There were 90 replies. To these a letter was sent giving details of the work, wages \$2.75 per day, steady work the year round, no lost time, low rent for house and garden. Out of the ninety only six investigated and of these two applied for a position, one of these was physically unfitted for outdoor work, so that out of the ninety apparently interested and looking for work only one cared to work on a nursery.

A second advertisement was inserted as a number of men were wanted, but was barren of results as soon as they found out what kind of work it was.

The Guarantee as a Business Builder

The guarantee is a business builder because it is a confidence builder. Select in any industry to-day those firms which you consider most successful. Does not the very fact of their success beget your confidence? Is not the present standing of those firms a guarantee of their treatment of you? If then it be impossible for us to imagine a truly successful business without this element of confidence, this guarantee of fair treatment to the public. Is not the reverse equally true? Are not two things which are equal to the same thing, equal to each other? If it be impossible to build a truly successful business without this element of confidence entering in as a foundation and backbone, should not every business which aspires to greater success, see to it that first of all it establish confidence with the public as the very iron frame work of the business structure it intends to build?

Business is built on and around confidence. Without it business is not built; without the confidence of clients, business is shaky and will never rise above the first story. It is like going up hill with half the cylinders of your car missing. You have cylinders and other parts that are not only in disuse but worse, they are a drag on the good cylinders—all for the want of good spark plugs.

Well the guarantee for nurserymen is like possible Spark Plugs—use them and they will develop confidence building power. Say what you guarantee and it will go. —Why?—because that guarantee is a definite index to others just where you stand, an index of your confidence in your own goods, and confidence you must have if you expect the customers to have it; for confidence is contagious—lack of confidence is even more so. Your lack of a guarantee to some minds is index to your lack of faith in your own goods. It is a sign to many that you dare not claim anything for your goods because they will not stand it.

The undersigned well recalls the time, place and circumstances when he was first urged to guarantee nursery products. He scorned the idea—"What! guarantee plants to grow—why that depends on the customer." And then came back the actual experience of the firm which offered a certain number of socks, worn alternately for a certain number of weeks with the guarantee to replace any which showed holes in that time. It worked and when it was tried on nursery stock it worked there and has for fifteen years. It is doubtful if proportionately as many plants are being replaced to-day to make good losses as were in the years before this guarantee went into effect. Whereas formerly only those who kicked got it. Now all our clients, present and prospective are being inoculated with the virus of this confidence building guarantee, and even if they pay a little bit more for the stock, they are happy in the security that the firm stands ready to make good. From the nurserymen's standpoint, the happy and safe thing about the situation lies in the fact that the majority of people are honest—those so mean as to ask for more than a square deal, if decently treated are so scarce, as not to affect the results, by even a half of one per cent.

Is there a reputable one of us in the American Association of Nurserymen to-day who does not furnish his retail client with at least this service:—

1. True to Name
2. Free from Disease.
3. Arrival in good condition.

Is not every clean wide awake nurseryman doing this to-day? Helping his customers to collect claims if the Railroad be at fault. Are not these three things a type of service now rendered by most genuine nurserymen—but do we say so? Why hide this distinction. Why not speak out and say what we do and stand back of it and insist that everyone else who says it shall likewise, do it—Then let the Public know that there are nurserymen and nurserymen, and they will quickly see which ones to trust.

After all it is Service the Public wants. The public can be trusted to guard itself from hucksters, if we teach the Public to know the sign and seal of those nurserymen from whom they can get fair value and a square deal. We who know and practice modern merchandising methods, without overstating, dare to say so in a plain confidence building guarantee. Why longer let this asset appear only on the expense side of our ledgers, where if capitalized into a Business Building Guarantee, my experience leads me to believe, that it can be made to produce increased business, higher prices and more profits.

West Grove, Pa.

"One Who has Tried It."

P. S. One American Nurseryman, perhaps one of the largest moneymakers has outstript us all. See his guarantee. (Catalog of Geo. C. Roeding, Cal.)

HOW IT WAS "DID" IN DIXIE

Once upon a time, several years ago, one of the members of The Southern Nurserymen's Association stated in open meeting that he felt that the time had come for nurserymen who worked through agents to get together on a certain proposition, and called a meeting for all who were interested. This meeting was held several months afterward with fairly satisfactory results. However, there were one or two leading concerns that could not be induced to line up on the work at that time.

On account of the fact that we could not get full co-operation, the proposition came pretty nearly going through, but as time went on, everybody knew more and more that we needed to work together, and we finally got the parties who would not go in at first to line up, and now they are really the most enthusiastic supporters of the movement.

The main idea is simply that we had to go ahead although we could not get everybody interested, and even now there are some of the nurserymen who have not joined in; in fact, we do not hope to ever get them all in. We have to keep everlastingly at it.

O. JOE HOWARD.

PERNICIOUS PUBLICITY

"Here's some stuff that should be stopped" says F. F. Rockwell, Manager of the Nurserymen's National Service Bureau, New York. "The right kind of publicity is all right, but here's an instance of the wrong kind."

In a Chicago paper recently this statement appeared: "Every variety of Barberry,—the common, the purple or the bronzed leaved, and all the rest,—are under fire, and it is hoped that Illinois will soon be comparatively free from the pest. The United States Department of Agriculture is co-operating with a similar department at the University of Illinois in this work."

The above, of course, refers to the "common" barberry because of the part it plays in the spread of wheat rust.

As every nurseryman knows, the Department of Agriculture has stated frequently that the Japanese Barberry is not a host of the wheat rust.

From information from other sources, I know that other newspapers have been guilty of the same carelessness in remarks about the wheat rust and barberry. Every wide-awake nurseryman should be on the look-out for this sort of thing and take the matter up immediately with the editor of his local paper anywhere such statements may appear so that the public may be set right. I know of a number of instances in which beautiful hedges of Japanese Barberry have been torn out as a result of this misdirected "patriotism" on the part of the papers.

This information is being sent to 700 newspapers which the National Service Bureau is supplying regularly with educational articles on small fruits, shade trees, shrubs, etc.

Another "warning" that has gained some publicity is that planting should not be done this year because of the 17-year locust. More damage is done every year to newly planted stock through careless planting and ignorance than the seventeen year locusts could do in seven times seventy-seven years.

The National Service Bureau, of course, does everything it can to combat this sort of thing, but individual nurserymen should co-operate by watching their local papers and immediately taking it up with the editor when they see such statements.

ECONOMIC BOTANY

It is difficult to understand why the study of botany is so repellant to the average person. It is rarely one meets with a student who takes up this study out of love for it, and when the college or high school course is done, what they do learn is promptly forgotten. Even among our own profession where you would think a good knowledge of botany was almost essential, very few are interested in it. In fact, the practical grower seems to think that a knowledge of it would be detrimental to him. It is quite true he can get along without it, as it does not seem to be an essential part of the growing and merchandizing of plants. This, however, is an extremely superficial view of horticulture. When we stop to realize that directly or indirectly a very large propor-

tion of the wealth of the world is derived from the vegetable kingdom, such as food, clothing, building material, medicines, rubber, oil, dyes, resin, etc., it is a wonder that more students do not follow the study.

It may be there is not much direct profit in studying systematic botany or the classification and nomenclature of plants, or in geographical botany which relates to their distribution, but with the economic botany which confines itself to the study of the values and uses of plants to mankind, there is a field that would be attractive to the most materialistic mind.

The potential wealth hidden away awaiting the experimenter and investigator is tremendous. Some of our insignificant common weeds may have great wealth stored away in them, which only awaits the discoverer.

At one time the potato and tomato were semi-poisonous weeds. The call has already gone out for some plant from which to make paper. Forests are fast being used up and some plant other than trees will have to be found for this purpose. There are thousands of acres of swamp land that are available for the purpose if the right kind of plant can be found that will make suitable pulp or fibre.

There are thousands of unknown drugs and chemicals still hidden away awaiting the investigator; edible fruits to be investigated, grown and exploited. Praiseworthy efforts are being made in many of our schools, colleges and experiment stations to arouse the interest of the young men of the country and to teach them the importance of the science of botany in its economic aspect.

The young nurseryman who would take up the study of economic botany would find vast fields of enterprise open up before him, and through his ability to grow plants would be best fitted to develop any discoveries he may make.

SEEING WITHOUT OBSERVING

We often get so accustomed to seeing things we fail to observe them. It is not an uncommon occurrence for a man to have a calendar in front of his desk or a blotter on his desk, advertising the very thing that he does not know where to find, and for this reason advertisements often fail of the purpose for which they are intended. They should always be fresh and carry some pithy message.

There is no doubt that some of the finest products that have been advertised for many years have been put in the back-ground by an inferior article, chiefly because advertisements of the first mentioned product failed to tell the public the whole truth.

Edward N. Hurley, chairman of the United States Shipping Board calls attention of editors to a letter written by J. H. Rosseter, Director of the Division of Operations expressing his views on the question of successful operation of ships under the American flag in foreign trade.

Nurserymen are not interested, what interest they did have has been killed by the Plant Exclusion Act put in operation by another branch of the government.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance	\$1.50
Foreign Subscriptions, in advance	\$2.00
Six Months	\$1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., June 1919

Subscribers to "Nurserymen's Fund for Market Development"

On every side we hear the word RECONSTRUCTION. reconstruction used and realize to a certain extent, business, society, policies and politics are undergoing reconstruction without trying very hard to reconstruct our own ideas and codes.

It is true conditions are forcing us to adjust ourselves to the new regime in the world's history, but individually we are letting George do all the reconstructing, and like sheep following the leaders even if they are goats. If there ever was a time when our own particular business was in a state of flux and in condition to be moulded into anything desired, that time is now.

The time is pregnant with big, vital things that are going to affect the future of the business. The leading nurserymen of the country are going to meet in convention this month. If this opportunity to reform and adopt a code of ethics to govern the business in the future is missed it will prove our wishes for better conditions are not genuine.

There is the old question of prices still in chaos.

The method of controlling production to prevent glutted markets and waste.

A sensible recognition of those entitled to trade prices and a well defined ruling on those who are entitled to receive less than retail prices.

Credits.

There are a number of trades that make it practically impossible for the consumer to buy except at consumer rates. Plumbers supplies and the glass trade are examples.

It may be argued that the nursery business is different, of course every business is different, but they are all amenable to sound business practices.

If the leaders as represented in the national Association would show a solid front, the corner nurserymen would not be able to affect prices very much.

Next year there will be from five to nine million plants short that have hitherto been imported.

Are the wholesalers going to take advantage of the shortage and ask the same price to the trade as to the consumer, or will they decide what is a fair retail price, and only ask their own portion.

If the nursery business is to develop, a plan will have to be worked out to train more skilled help.

Standardizing nursery stock as to grade and quality is also a great need.

These are only a few of the problems awaiting solution and action.

If there is no solution under the present system of doing business, now is the time to change the system.

PRODUCTION AND DISTRIBUTION

The most intricate problem or piece of machinery becomes simple if it is taken apart and analyzed and studied in detail. The nursery business is extremely intricate seen as a whole and seems to defy solution when attempts are made to make rules and regulations that will put it upon a more satisfactory basis.

There are so many conflicting interests. In most lines of merchandising, a manufacture or production is entirely separate from the selling or distribution. Not so with nursery stock. Some of the largest wholesale growers are also retailers. The result is an endless confusion and conflict of interests and prices.

If it were possible to simplify the nursery business by separating the fruit tree grower from the growers of ornamentals, and then again consider the interests of the growers apart from the distributors and consumers, it would be a much easier matter to find a satisfactory basis. Take for instance the matter of prices. If the fruit tree grower would be satisfied with his job to grow double X grade trees and not concern himself at all about the selling of them, the chances are he would make more money with less worry than he does by attempting to sell them as well as grow them. Suppose the cost of growing fruit trees was \$10 per 100, giving him a reasonable profit, the distributors finding the market and handling them at another \$10 per 100. This brings them somewhere about the average price they have been bringing on the market recently. These figures of course are only suggestive. The retail single selling price could then be fixed at say three and one-half times the cost from the distributors or middlemen.

It is only by separating out and handling nursery stock upon the most approved mercantile methods that there will be satisfaction and stabilized prices.

To many it is difficult to understand why there should be such a big difference between trade and retail prices. The difficulty vanishes when experience teaches.

The main reason is because the elements of labor and risk enters so largely into the handling of nursery stock. Add to these the short planting season, and the retailers overhead and the need for a multiple three and one-half times is readily understood.

Bridging the Gap

Are You in the Nursery Business For Pleasure or for Profit?

The biggest problem any manufacturer has to face is to "get the product over to the public."

That is just as true of the manufacturer of nursery products as it is of the maker of a commercial article.

There are two ways of selling a thing after it's been made. The first is to go to the possible consumer and ask him to buy; result is, he sets the price.

The second is, to convince him in advance that he must have that product; result is, that he comes to the manufacturer or to his distributors, and the manufacturer sets the price.

To illustrate: farm products in general are sold by the first plan,—price is based primarily on supply, (with have that product; result is, that he comes to the manufacturer or to his distributors, and the manufacturer sets the price.)

Which policy has proved the most profitable for those following it? How often in your papers, do you come across some reference to a millionaire soap king, or razor king, or overalls king, or even a hair- tonic king? But when you read of the wheat kings, and corn kings, and tobacco kings, and cotton kings, reference is not made to the men who produced those things; but to the men who sold them. The men who produced them sold according to the first plan, at a price fixed by supply. The men who sold those things to the consumer, sold according to the second plan, by creating a demand that enabled them to set the price, and that made it possible for them to put the price where it would at least cover cost of production and selling.

Can Nurserymen Draw a Moral From Spuds and Talking Machines?

Some years ago, when Eastern "capital" had become interested in certain "Bonanza farms" out West, and the latter had failed to return any profit on the investment and were being broken up, a certain magazine sent out a "trained investigator" to find out what the reason was. In the course of his travels the investigator came across a native farmer who was working part of a former bonanza farm.

"How is it," asked the writer, "that you can make a living in this country, when these big farms, with power machinery and expert management and all that, failed?"

"Wall, Stranger," returned the farmer, "I dunno; unless it's becuz there's only two sure crops in this here country—ice and children;—and the small farmer's got the children!"

Undoubtedly the farmer thought he had the best of the argument. But did he? The corporation, failing to get prices which covered cost of production and selling, quit that business. The men who were backing it up, put their money into some line where competition was in creating a market, not in underbidding on prices. The

farmer kept on, working himself and his whole family unsparingly, and selling his crops for what was offered, with little or no regard to what they cost him—that being, in fact, something on which he did not have even hazy information.

The records of the Department of Agriculture at Washington are illuminating on the point of prices based on supply. What has happened with Irish potatoes is one of the fine healthy examples of the let-supply-and-demand-take-care-of-it policy. A chart of production and prices for forty years shows the most violent fluctuations; big crops and low prices invariably followed by small crops and high prices; resulting again in "over production," and low prices. Frequently in big crop years the entire crop brought less than a much smaller crop the year previous; and in many sections large percentages of the crop would not be dug at all—the potato-growers "brush-pile!"

But "over-production," in the sense it has been used, hasn't meant the production of more potatoes than the country could have used, at a fair price. It has merely meant the production of more than the growers could sell, under normal, undeveloped market demands, without bidding against each other on price. And when that condition was reached, "The bottom dropped out" of the market, and potatoes left the producer's hands at less than cost of production.

"But in the years when prices were good, and there was a fair profit, didn't the growers, realizing how much it would mean to them to have a demand big enough to move their next crop at the same price, even if it was a bigger crop, do something to stimulate the demand for potatoes? Wouldn't that have been a sensible thing to do?"

Do I hear some gentle reader propounding the above question? Ar-rah g'wan!, G. R. Folks who grow things out of the soil, don't do business that way!

Millions to Create Demand—Not a Thing to Fill it With!

Well, not all business is left to the mereies of chance "demand." There are some business men who have gained the reputation of being pretty shrewd, who value "created demand" so highly that for three years they have been spending real cash money to keep on creating it, even though they had not a thing to sell!

Take, as specific examples, the manufacturers of cigarettes, automobiles, and phonographs. With the entire output of their factories, either in their regular products or on special war work, contracted for by the Government, nevertheless they have continued to spend hundreds of thousands of dollars monthly to create demand for future business. And at the time they were spending it, it looked as if that business might be years in the future!

The potato-grower—representative of those who pro-

duce things from the soil—has been content to let the price for his product be determined by supply.

The manufacturer has realized that if he could create demand, he could move the product of a constant, even, stream of production, at a price fixed by him to cover cost, selling, and a reasonable profit.

These two policies are diametrically opposed.

They cannot both be right.

(Please pause here, and rub briskly until that has thoroughly soaked in).

They cannot both be right!

Is the Nursery Industry to Remain in the Farming Class; or Be Put into the Business Class?

Now of course there are many reasons why the growers of potatoes,—and of wheat and corn and nursery stock and other products of the soil—have continued to do business under the price-competition system. There is not space to go into that here.

The point of immediate interest is that some of these people have found it possible to get onto the other basis. Take the California orange growers, and the North Western apple growers, and the Florida Citrus growers, as well known examples. Even the Potato growers have made a real start in that direction!

What are the nursery growers going to do?

There has been a wonderful spring; "crops" cleaned out at good prices; prospects of a short supply for next year; and possibly the year after. Everybody planting again: as hard and as fast as it is possible to plant. But—

Unless the men who are doing this planting realize that they must invest at least a fraction of a per cent. of this year's business to create demand for the "crops" that are coming on, two, three, four, and five years hence, then it is only a question of time, and of very short time, before there will be an "over supply" again, with cut-throat less-than-cost-of-production prices, and all the old vicious circle of results of prices determined by supply alone.

Friends, there are two things, and two things only, that can possibly make the future of the nursery industry more profitable than the past has been:

TRADE ORGANIZATION

MARKET DEVELOPMENT

Undoubtedly, the committee appointed by the president of the National Association is going to propose something definite along the first of these lines, at the Chicago Convention.

The Executive Committee of the Organization for Market Development, which has been getting the work of the Nurseryman's National Service Bureau, organized and started, will have a definite, practical, program of action for the coming year to announce at the Convention.

If you are one of those who believe that there should be profit as well as pleasure in the nursery business, not for the next year or two only, but as a permanent thing, then it's up to you to contribute to and to work for

The MARKET DEVELOPMENT CAMPAIGN.

MAKE YOUR HOTEL RESERVATION EARLY

Those who expect to attend the Nurserymen's Convention at Chicago, June 25th to 27th should not fail to secure hotel reservations in advance.

The Seedsman's Convention will meet at the same time with headquarters at the same place, Hotel Sherman.

All indications point to a large attendance and the best convention in the history of the Nurserymen's Association.

Make application for reservations to Frank W. Bering, Manager Hotel Sherman, Chicago, Ill.

Rates, room with bath \$2.50, \$3.00, \$3.50, \$4.00 and \$5.00; room with bath for two, \$4.00, \$4.50, \$5.00 and \$6.00; suites of two rooms, two persons, \$5.00, \$7.00, \$8.00 and \$10.00; suites of two rooms, four persons, \$8.00, \$9.00, \$10.00 and \$12.00; parlor, two bedrooms, two baths, \$12.00 and \$15.00; a limited number of rooms without bath for one person, \$2.00, \$2.50; a limited number of rooms without bath for two persons, \$3.00, \$3.50.

THE KEYED LIST

The landscape architect stands at his drawing table and proceeds to fill in his plan and key the planting. His mind is concentrated upon producing a picture for his client. If he is a good plantsman and knows his material well, from whence it can be procured at the proper time and in the right grades, the materialization of his picture will proceed apace, but too often his training has been along lines that has only given him a casual acquaintance with plants, he knows little or nothing about their habits or requirements, depending on book or catalogue description and his efforts fall very short of his aim.

The keyed list may be properly termed a mechanical effort to produce landscape art. The very nature of plants forbid that it will ever be a complete and successful method. It never can be anything more than a starting point, frame work, or skeleton of the picture in the mind of the artist, and unless the man who actually carries out the plan has plenary powers to substitute, adjust as conditions may require and is thoroughly interested and an able gardener.

It is not however the ultimate success of the planting that the nurseryman is interested in so much as filling the landscape architect's order.

No one but those who have had the handling of an order for a keyed list have any conception of the labor, care and cost required to handle them.

If the list is of any length it requires knowledge, skill, care and attention the nurseryman is rarely equipped to give during the rush of the planting season, and it is a safe statement to make, that they are rarely profitable unless charged for in advance of regular prices.

It depends entirely on the kind of list what advance on regular prices should be added, but the keyed list should receive special consideration on this point before accepting them, and a proper charge added to cover their proper handling.

A STORY OF LONG AGO

Once upon a time, when the present large Bureaucracy was being built up in Washington, there existed what was then considered as a large and important Government organization known as The Department of Medical Science. The business of this Department was to keep up the health of the people of these United States and to keep down the germs and diseases which afflicted them. But this was a big job, too big for the Department some of its officials admitted, for it should be remembered that even the chiefs of this Department were not what we would now call big men; in fact while most of the chiefs were graduate Doctors they were unable to make a living in competitive practice and were glad enough to get an easy steady job in Government service at good salaries.

But Government service was very slow in those days, there was little excitement, few visitors, very little to do, so it was hard to pass the relatively short hours these employees worked. Of course they could have kept themselves busy keeping the American people free from disease, but had their chiefs not admitted this was too big a job for them, and as many more deserving democrats were being brought into the service, jobs had to be provided for them. So the chiefs of the Department began to cogitate and finally evolved a scheme which would stop all immigration, for were not many diseases brought into the country by emigrants and other visitors to our shores—but first of all data must be collected to justify such a drastic measure.

So in 1912 these chiefs introduced into Congress a bill creating a Federal Medical Board consisting of five bureau chiefs in the Department of Medical Science, and which gave this Board the power to make regulations which it considered necessary to protect the people from disease. Of course nothing was said to Congress about what the Board's ultimate object was once they had the arbitrary power to make regulations, and as the Board was in a position to show to Congress the many advantages of keeping diseases down, and there was very little opposition, the measure was passed by Congress.

These bureau chiefs now had lots of work for their regular and new men in collecting data of the many diseases which emigrants had brought in and which others might bring in. Jobs were now provided for thousands of State Inspectors to inspect every emigrant after arrival at destination, and when it is considered that the salaries of these chiefs were based largely according to the number of employees they controlled and the influence they wielded it can be said that things were going well with them. The new law required them to call hearings whenever they contemplated placing a quarantine on any class of emigrants, so frequent hearings were called which brought some public prominence to these chiefs and provided some excitement and interest. Altogether some 36 quarantines were placed in seven years, but none of them were of much importance.

Then in the year 1919 the crash came, the Board of Medical Science issued a decree stopping all immigration from all countries except Germany, Austria, Turkey

and Bulgaria. Why Belgium, France, Great Britain, Holland and other "allied" nations were hit so hard while "enemy" countries were so distinctly favored was ascribed to the influence of a German Doctor on the Board—but perhaps the amiable Doctor had taken out U. S. citizenship papers. Anyway there was a great scream from the people at what they termed the arbitrary, autocratic, un-American action of the Board, protests were filed by hundreds, Congressmen and Senators busied themselves, but all to no purpose—the five bureau chiefs stood firm.

Finally the Secretary of the Department of Medical Science was appealed to by representatives of an overwhelming majority of the people, who explained that they never had a chance to present their case at the hearings, that the scope of the hearings was hidden from them, that such hearings were stuffed with the Board's friends and that anyway these hearings represented little else but star chamber proceedings. The Secretary listened politely and promised to consider the briefs submitted and render his decision later. About two weeks later the Secretary rendered his decision, but as he used the same words and worn-out arguments of the Board of five, the people said "it is the voice of Jacob but the hand of Esau."

The country got along somehow without much immigration until the year 1921—when it was found that the stopping of immigration did not stop the spread of diseases, so the five wise men of Washington began to cogitate again. They decided that steamers arriving from foreign ports brought in diseases even when they brought no passengers, and as the American people must be protected from disease at all costs and quite regardless of commerce or friendly relations with foreign nations (which the Board of five knew little about anyway) all foreign commerce was stopped. Of course there was a strong volume of dissent from business men, solemn warnings were given of future perils—but as the Board considered the suppression of foreign commerce necessary to keep the people free from disease, the Board stood firm.

Time passed on and it was found that the stoppage of immigration and of foreign commerce did not decrease the disease which afflicted the people. It was also found that disease was being carried on trains, canal boats and various forms of interstate transportation, so the same old arguments were trotted out that were used in justifying the stoppage of immigration and foreign commerce and interstate trade was stopped throughout the United States. Of course the people made a big howl, but was not the Board protecting them from disease? so the Board stood firm.

In the year 1925, as disease continued as before among the people, and the people died as before, these five wise men of Washington decided that their former regulations were not drastic enough to prevent the spreading of disease, so they issued further regulations stopping all communication between cities, towns and villages. Trolley cars, wagons, jitneys, automobiles and all modes of transportation were stopped, for did they not carry people who were apt to spread disease? Of course the people figured they would sooner have the disease than

the cure, but against all these arguments the Board stood firm.

And it came to pass that in the year 1926 the people of these United States reached the conclusion that so long as man existed disease would exist too, that while the Federal Board of Medical Science had made us look ridiculous to other nations with our exclusion policy and had killed commerce and trade, they hadn't accomplished anything that they were created to accomplish. They hadn't reduced disease one iota, so on the united demand of an awakened and outraged people Quarantine No. 38 was passed by Congress abolishing the Federal Board of Medical Science as an organization in restraint of trade, and in course of time these United States resumed its place among the great nations of the earth.

M. A. C.

TWENTY-FIVE DOLLARS TO FIFTY DOLLARS WILL BE PAID FOR SPECIALLY FINE BLUEBERRY PLANTS

For several years past Mr. F. V. Coville, of the United States Department of Agriculture, and Miss Elizabeth C. White, of New Lisbon, New Jersey, have been cultivating blueberries and working to produce new and better varieties. To get new varieties they find the very best wild bushes and then cross-breed these wild plants. The seeds resulting from the cross breeding grow into all sorts of new varieties, just as seedling apples are seldom like the tree they came from. Many of these new varieties of blueberries are poorer than their parents, but about one in a thousand turns out to be much better than either parent and makes a promising new variety.

About ten years ago the Department of Agriculture published Mr. Coville's first work on blueberry culture. His most surprising discovery was that blueberries cannot live in a well-balanced, fertile soil. They require a sour or acid soil and are actually killed by the application of fertilizer which would be the best possible food for ordinary plants. Some years ago a wild blueberry plant was found in Massachusetts with berries more than three-quarters of an inch in diameter, but it was killed by people who did not understand its proper care by being fertilized.

Since 1911 Miss White has been associated with Mr. Coville in these investigations, he in the Government greenhouses at Washington working out the scientific problems and originating new varieties by cross breeding, and she at New Lisbon, New Jersey, raising these new varieties and the best wild plants that could be found. Mr. Coville and Miss White are now trying to find a number of wild plants to use for this work. They already have a few plants that have berries three-quarters of an inch through, and hope to produce hybrid berries an inch in diameter. They want more unusually fine wild plants, and will pay \$50.00 for especially fine plants with very large berries.

But it is not only the size of the berry that counts, and they are willing to pay smaller prices for plants that have many berries of slightly smaller size if these berries are of unusually fine flavor. Some bushes bear much more heavily than others. On some bushes the berries stick so tight that when they are picked a piece of the stem pulls off with the berries, or the berry is torn and the juice leaks out. On other plants the berries come off the stems just right. Berries from some bushes spoil soon after they are picked, while others will keep for a week. Some berries are black and others of a beautiful light blue color. There are doubtless thousands of bushes in the country with berries three-quarters of an inch or more in diameter, and many other bushes with berries just a little smaller but of unusually fine quality, but it is only by having people on the watch for them that these fine bushes can be discovered.

The fine varieties developed by cross breeding will be distributed by the Department of Agriculture to persons who have learned enough about cultivating wild blueberries to show they can handle the new varieties with success.

Persons who are interested in finding such plants should write at once to Miss Elizabeth C. White, of New Lisbon, New Jersey. Miss White will send full directions, with measuring

gauges, and bottles of formaldehyde for mailing large berries that are discovered.

Through the efforts of Mr. Coville of the United States Department of Agriculture, in co-operation with Miss White, the cultivation of blueberries will probably be well established in a few years.

Blueberries are commonly known in the South as huckleberries.

The Directors of the American Peony Society had their annual meeting in New York in March 1919, and adopted a protest against Quarantine No. 37, which very pertinently points out the unjust and autocratic features of the quarantine, also that it is unscientific and ill-considered.

The Directors of the American Peony Society also respectfully presented the following recommendations to the Secretary of Agriculture, to the Horticultural Board, and to the Members of the Senate and House of Representatives:

That the Quarantine regulation No. 37 should be at once suspended.

That a new quarantine measure should be framed with the co-operation of the nursery and greenhouse interests, which should contain only such provisions of exclusion as are demonstrably and convincingly necessary, and such as would be really effective.

That where important classes of foreign plants are to be excluded, several years notice of such exclusion should be given, in order that the cultivation of stock in this country may have reached a fairly adequate development before the foreign sources of supply are cut off.

A NEW LAW PROPOSED FOR MICHIGAN

There is a bill before the House of Representatives in Michigan to prevent shipment of nursery stock from one State into another under other than its true name. That the nursery business should need so many laws would indicate that nurserymen are mostly rogues.

To those who are acquainted with nurserymen it is difficult to conceive the necessity of such a bill. It goes without saying that there is about the same percentage of unscrupulous people in the nursery business as there are in any other, but such a bill, if it became law would really do more harm than good.

Those who are familiar with horticulture and the nomenclature of plants will readily recognize the tremendous possibilities for law suits. The framers of such legislation are evidently not familiar with plant life at all. Often the nurseryman is put to a great deal of trouble to interpret the customer's order and there would often be more dissatisfaction in shipping stock as ordered than upon the nurseryman's interpretation.

Very often common names are used. These vary in different localities, to say nothing of synonyms and conflicting authorities as to the correct nomenclature of plants. Of course, such a law as is proposed in Michigan will be all right when all Peonies, Roses, fruits, shrubs and trees have a name which is known to the public and can always be identified as belonging to one particular plant. Even under such conditions there will be an opening for a law suit. A Baldwin Apple grown in one locality may have an entirely different appearance in another. The Bill should be entitled, a Bill to provide employment for lawyers.

Newport, R. I., May 10, 1919.

The National Nurseryman,
Flourtown, Penna.

Gentlemen:—

Just a word regarding street trees, referring to article which appeared in last issue, page 130.

It may surprise you, as it did me, that the Oriental Plane has proved a failure in this section both as a street tree or for any other purpose when submitted to a weather test such as was experienced in the winter of 1917-1918. Whole rows of them were split open—the result being a dying back of tops in summer of 1918, in fact some of them were killed back to the ground. Maples in variety however, showed no ill effects.

Sugar Maple it should be said does not do well planted near the ocean—but inland nothing finer can be seen—a few miles is sufficient to make the difference between success and failure.

The Norway Maple is still the favorite street tree here—and does remarkably well, and is much to be preferred to the Silver Maple, which is good in its way only for immediate effect, and can be removed when suitable trees have made sufficient headway. The Sycamore Maple is also good for temporary work, they grow coarse with age.

Yours truly

ALEXANDER MACLELLAN.

SCENT

Civilization has deprived most people of almost all primeval powers of smelling, but to those who are blessed with any keen olfactory power, the scents of the garden are one of its greatest joys.

We think that many nurserymen and seedsmen do not make enough of this point in their catalogues and descriptions of novelties, and so miss what would be a strong pull with many buyers.

Being among those rather favored in respect of smelling powers (or perhaps we should regretfully add, having been), we were pleased to note the other day that Mr. Hicks, in his charming rose exhibit at the R. H. S., called special attention to the new roses which excelled in the matter of perfume, and it was plainly evident that the hint secured an eager response from the public.

We feel sure that more attention to this point would be a paying proposition. Our Carnation men might give more prominence to it than they do. The same remark applies to other things, for instance, the delicious scent of Prince of Austria Tulip and a few other sorts is often passed over, and in Peonies, some are highly favored, while others are almost nasty.

Has anyone yet paid proper attention to the varied scents of Narcissus? We were reminded of this a few days ago by noting the rich tropical perfume of "White Lady," almost reminding one of a Tuberose or Stephanotis.

There is a wide scope for observation in this line among shrubs and trees. Has anyone ever noted in a catalogue the delightful scent given off by the dying leaves of the Bird Cherry (*Cerasus padus*)? We pass a tree en route to the office, and have often stood a few sec-

onds to inhale and enjoy the fragrance, and wondered whether this charm were generally appreciated.

To multiply instances would be tedious. Our idea is that all nurserymen should promptly note them when encountered for the next issue of their catalogue, and so add something to the joy of life for garden owners, and incidentally to their profits in business.—*Horticultural Advertiser*.

EXPERIMENTS IN THE CONTROL OF THE ROOT FORM OF THE WOOLLY APPLE APHIS

B. R. Leach

A series of experiments conducted in Virginia during the seasons of 1914 and 1915, the work being based upon results obtained by French investigators in the employment of carbon disulphid and sodium cyanid in solution against the grape phylloxera. The results have been summarized by the author as follows:

"Carbon disulphid, in solution at the rate of .05 oz. to 4 gal. of water and applied at the rate of 0.75 gal. per square foot of soil, will control the root form of the woolly aphis under suitable soil conditions. The liquid is best applied by preparing shallow basins about the tree and should be applied only when the soil is in a moist condition. The solution is best prepared by pouring the carbon disulphid into the water and agitating vigorously. The carbon disulphid thereby breaks up into small globules, some going into solution and the remainder forming a mechanical mixture with the solution. The gas diffuses laterally and vertically only as far as the liquid penetrates and therefore every square foot of infested soil must be subjected to the action of the solution in order to insure complete control. When used at the foregoing rate the carbon disulphid produced no injury to the roots of apple. The treatment may be made at any time during the growing season except during the period of two or three weeks in the spring when the trees are budding out. In orchard practice the solution is best applied by using a power spraying outfit and two auxiliary tanks.

"The advantages of this method are, first, the even diffusion of the liquid and complete aphid mortality in the soil area treated and, second, the safety with which the disulphid can be used. The disadvantages of the method are, first, the huge amounts of water required, with consequent high cost of labor; second, the difficulty, on any but level ground, of preparing basins with level floors, thus insuring the proper distribution of the liquid over the area to be treated; and, third, the wide area of infested roots on older trees, every square foot of which must be treated with the liquid. This last condition precludes the use of carbon disulphid except on small trees with restricted root areas.

"Sodium cyanid at the rate of 0.5 oz. to 4 gal. of water did not kill the woolly aphis in the lower soil depths even when a superabundance of solution per square foot was employed. No injury to apple roots resulted when the material was employed at this strength. The only advantage this material possesses, as compared with carbon disulphid, is its ready solubility in water. On the other hand, its uncertainty in producing aphid mortality in the lower soil levels, together with the extremely pois-

onous nature of the material, precludes its use in practice.

"When kerosene emulsion is applied to the soil it disintegrates into its component parts; the first inch of surface soil retains the soap and some of the kerosene content; the first 4 in. of the soil retain almost all the remainder of the kerosene. Kerosene emulsion, therefore, does not kill the aphids in the lower soil levels and the cost of preparing the quantity necessary for soil treatment renders it of little value. The application of this material to apple roots, in the author's experience, results in severe injury to the tree.

"Deep planting will not prevent woolly aphis infestation and results in the death of many trees so planted, due apparently to the inability of the root systems to function properly under these conditions."—*Experiment Station Record*.

A GOOD SUGGESTION

In a statement which will be mailed to holders of registered Liberty Bonds, together with their interest checks, Carter Glass, Secretary of the Treasury, pays high tribute to the 20,000,000 Americans who so patriotically assisted in winning the war by purchasing War Saving Stamps and Liberty Bonds. Mr. Glass urges that the interest on the Liberty Bonds be converted into War Savings Stamps, which pay 4 per cent interest, compounded quarterly. Secretary Glass's statement follows:

"The United States appreciates your unselfish patriotism in lending the money which helped win the war. Upwards of 20,000,000 Americans shared this honor, and are receiving during 1919 more than \$700,000,000 interest.

"Both good citizenship and your own profit will be served by the reinvestment of your share of this great sum in War Saving Stamps. The Government will be saved this immediate outlay in cash. You will profit by the quick reinvestment of your earnings, which is the high road to prosperity and comfort."

(Signed) CARTER GLASS, *Secretary of the Treasury*.

CENSUS OF AGRICULTURE

A tentative schedule has been printed under date of March 28th for the United States Census of Agriculture. This is merely to thoroughly try out the form and data to be collected before issuing the perfected forms. It is a very simple schedule and easily filled in.

Of course, a census of orchard fruits is called for, getting data as to the number of trees and total quantity in bushels harvested, the same of subtropical fruits, nuts and small fruits, grapes and grape products.

The only data required from nurserymen is the number of acres used for growing trees, plants, and vines, and the amount received from the sales of nursery products during 1919.

BORERS

According to reports from the U. S. Department of Agriculture, borers are not so liable to attack trees that are growing in thickets or close together. The denser the underbrush about the trunks of the trees, the less

damage is done. Trees growing from two to three feet apart are seldom injured, while nearby isolated trees were riddled.

All trees and all parts of the trees are not subject in the same degree to attack by the borer. Rough bark provides crevices in which the borers deposit their eggs. Young trees less than one and one-half to two inches at the base, are not attacked unless the bark is rough. On younger trees the borers are found at the base and near rough crotches. Trees with trunks more than 5 or 6 inches in diameter rarely contain the insects. On such trees the larger branches frequently are infested; but such injury is seldom common enough to do much harm.

Chicago, Ill., May 10, 1919.

Mr. J. R. Mayhew, President,
American Association of Nurserymen,
Waxahachie, Texas.

All arrangements made for your convention this year. We will guarantee that you are taken as good care of as last year and will endeavor to do better for you. We have booked you for the large hall at entrance of elevators. Know you will be pleased with the manner in which we are going to look after you.

J. O. CONWAY,
Hutchinson Hotel
Sherman Company.

GOOD EXPERIENCE

The past spring nurserymen did a maximum amount of business with a minimum amount of help. It certainly was a strenuous time.

It should prove a valuable experience to guide him in adapting his equipment and organization to conditions when things get more nearly normal.

He knows now just what he can get along with at a push.

Dear Sirs:—

As I am now leaving town for my country residence, I shall be glad if you will henceforth mail your highly valued publication to my country address as below.

I will take this opportunity to go on record by telling you that I regard *The National Nurseryman* as an instructive trade journal second to none on the American continent.

Yours sincerely,

MARTIN KROEGER,
Fruitland Nurseries,
Remo, B. C., Canada.

QUARANTINE 37

The time is past to discuss the wisdom or foolishness of Quarantine 37. It is now a law of the land, and however much the country may suffer under its working. The only thing to do is to make the best of it. However ill advised it may be, and unsuccessful in accomplishing the purpose it was ostensibly put in operation for. It will undoubtedly force the nurseryman and florist to develop the resources of the country.

The nurserymen, florists and horticulturists of the country have been poor guardians of their craft to have allowed the control of their own business to pass out of their own hands.

Notes from Arnold Arboretum

JAPANESE CHERRY-TREES. Of the numerous Asiatic Cherry-trees now established in the Arboretum the handsomest with single flowers are *Prunus serrulata* var. *sachalinensis*, the Sargent Cherry, *P. subhirtella*, and *P. yedoensis*. These three trees have flowered and produced their fruit for many years in the Arboretum, and have shown the ability to adapt themselves perfectly to the peculiar and difficult conditions of the New England climate. *P. serrulata* var. *sachalinensis* is the northern form of a Cherry-tree which occurs in three varieties in Japan, Korea, and central China. It was once an important tree in the forests of northern Japan and Saghalien but has now been largely cut for the wood which has been used for printing blocks. This Cherry was first raised here from seeds sown in 1890, and when in flower is the handsomest tree introduced by the Arboretum into western gardens. The delicate pink or rose-colored flowers are short-lived, but the handsome foliage which is distinctly tinged with red as the leaves unfold turns to brilliant shades of orange and red in the autumn. *Prunus serrulata* and its varieties have produced a number of forms with double flowers, and these are the hardiest and most valuable of the double-flowered Japanese Cherries which can be grown successfully in this climate. There are fourteen double-flowered named varieties of the Sargent Cherry in the Arboretum Collection, but only two or three of them are large enough to have flowered here. These double-flowered Cherries bloom two or three weeks later than the single-flowered trees, and from these may be expected some of the handsomest flowering trees which are hardy in the north. Although double-flowered Japanese Cherry-trees have been cultivated in the United States and Europe for fully sixty years, they have never grown to a large size or given much satisfaction in western gardens. The trouble has been in the stock on which these double-flowered plants have been grafted. The proper stock for them is naturally the single-flowered species of which they are varieties, and if such stock is used there can be little doubt that larger and healthier trees will be secured than have been obtained when other species have been used as stock in Japanese and in American and European nurseries. It is fortunate that the plants of the Sargent Cherry produce every year good crops of seeds in the Arboretum; these seeds are carefully gathered and widely distributed so that there is reason to hope that in a few years this tree will adorn many American parks and gardens and supply stock on which the handsomest of the double-flowered Cherries can be successfully grafted.

PRUNUS SUBHIRTELLA. This is the Spring Cherry of the Japanese, which one traveller has described as the most delightful and floriferous of all Japanese Cherries. It is a large shrub rather than a tree, and few plants can produce more flowers than the two large specimens in the Arboretum where they have been growing for twenty-five years. The flowers are drooping, pale pink becoming nearly white as they begin to fade. Those of no other

single-flowered Cherry which has been grown in the Arboretum last so long in good condition. This Cherry is not known as a wild plant, but it is a good deal cultivated in the gardens of western Japan although rare in those of Tokyo. Unfortunately it does not reproduce itself from seed, for the seedlings are those of a tall slender tree common in the forests of central Japan to which the name of *Prunus subhirtella* var. *ascendens* has been given. This is still a rare tree in cultivation and its value in this climate is not yet established. A form of the variety *ascendens* of *Prunus subhirtella* has pendulous branches and is the well known Japanese Weeping Cherry-tree (var. *pendula*) now common in American gardens. *Prunus subhirtella* can be slowly propagated by soft wood cuttings, but the best way to increase it is by grafting or budding it on its own seedlings. Seeds are produced in quantity on the Arboretum plants and will be distributed to nurserymen anxious to obtain stock on which to work the true *P. subhirtella*. When the stocks are ready the Arboretum will supply a moderate number of grafts, and the nurseryman who will make it his business to produce a supply of this beautiful Cherry for American gardens will do a good thing for this country and incidentally for himself.

PRUNUS YEDONENSIS. This is the Cherry-tree which has been planted in great numbers in the squares, parks and temple grounds of Tokyo. It is a fast-growing short-lived tree rarely fifty feet high, with a short trunk not more than a foot in diameter and wide-spreading or erect branches. The flowers are white and slightly fragrant, and are followed by abundant small black fruit. This Cherry reproduces itself from seed and there is therefore no reason why it should not be common in American gardens.

PRINSEPIA SINENSIS is again covered with clusters of bright yellow flowers which spring from the axils of the half-grown leaves. This Prinsepia is a tall broad shrub with long spreading and arching branches, and stems armed with many spines. It is perfectly hardy and the handsomest shrub Manchuria has contributed to western gardens. There are only two specimens in the Arboretum and these came here from Petrograd in 1903 and 1906, and it has been found difficult to propagate them by cuttings. Fortunately last year one of the plants produced for the first time a few seeds and these have germinated, so there is reason to hope if the Arboretum plants become more fruitful that this species will be a common ornament in northern gardens. It has much to recommend it as a hedge plant. The species from northern China, *P. uniflora*, is a spiny shrub with small white flowers, and although it has little beauty its value for forming impenetrable hedges may prove considerable.

THE DOUGLAS NURSERIES SOLD

Recently, the old established nurseries of R. Douglas' Sons, Waukegan, Ill., were sold by Mrs. Thomas H. Douglas to Mr. Lee McDonough, who held them for awhile only, and has now sold them to Mr. Emil Bollinger, the well known Chicago Horticultural authority.

The nurseries were founded 71 years ago by Robert Douglas, who was one of the Pioneer nurserymen, and probably the best known forester in the United States.

TAKE YOUR HELP IN PARTNERSHIP WITH YOU

The age of master and man is past and those who can quickest adjust themselves to the new order of things are most likely to be successful in business.

If you can arrange it on both a profit and loss sharing basis so much the better, but arrange it you must if your business is larger than a one man concern.

Due to the fact that the nursery business has such a brief portion of the year when it can market its products, the balance being a period when there is no income to offset the pay roll, the nurserymen cannot pay wages the year round that will compete with other and more profitable occupations, so it is up to him to tie his help to their jobs by giving them an interest in it that will hold them and develop the best there is in them.

WANTED

A Horticulturist either landscape gardener, nurseryman, florist or truck gardener who has made good, and who, for any reason desires to make a change, and has about three thousand dollars to invest, may be interested in a proposition that I have to make.
 Address E. F. G. care The National Nurseryman.

NURSERY FOREMAN

wanted for our nursery in Western Springs, Ill. Must be strictly sober, able to handle help, and have experience in evergreens and ornamentals. Give full particulars in first letter as to past record, salary wanted, etc. Only first-class man wanted.

VAUGHAN'S SEED STORE, CHICAGO

WANTED—Experienced Foreman capable of handling a nursery plant located in middle west containing sixty acres of a general line of growing stock. Must be able to handle men, understand the keeping of records and detail work. Give experience, reference and salary expected. Box 548, in care of National Nurseryman.

AMERICAN FLORIST'S TRADE DIRECTORY

Price \$3.00, Postpaid

For Sale By

NATIONAL NURSERYMAN PUB. CO. Inc.,
 HATBORO, - - - PA.

∴ STRAWBERRY PLANTS ∴

Summer and Fall bearing varieties, shipped to you or direct to your customer under your tag.

Plants and service that pleases both you and your trade.

Let us quote you

V. R. ALLEN,

59 Lane Avenue

Seaford, Del.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobalan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
 SEEDSMAN

DRESHER,

Penna., U. S. A.

WE OFFER

Grape Vines, Currants and Gooseberries
 in all varieties and grades, also
 Grape and Currant Cuttings and Light Grade of Vines for
 Lining Out in Nursery Rows
 WRITE FOR PRICES

F. E. Schifferli,

- Fredonia, N. Y.

HORTICULTURE

A Magazine of Trade News and Cultural Information
 for the NURSERYMAN, FLORIST, SEEDSMAN and
 GARDENER. A reliable exponent of advanced Trade
 and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.

147 Summer St.

Boston, Mass.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance.

FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

BAILEY'S STANDARD CYCLOPEDIA OF HORTICULTURE

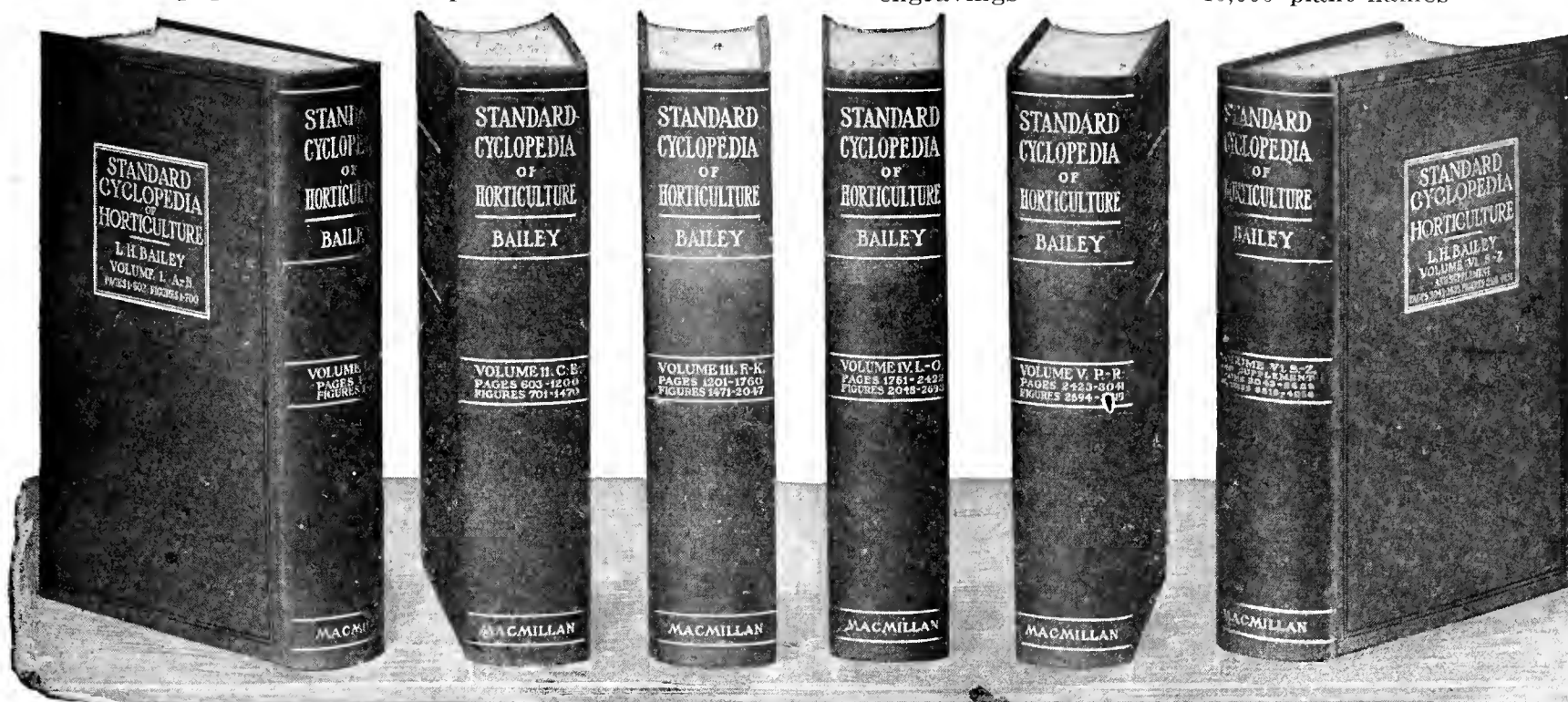
More than
3600 pages

24 full page
exquisite
color plates

96 beautiful
full page
halftones

More than
4000 text
engravings

Approximately 4,000 genera,
20,000 species and
40,000 plant names



The complete set of six volumes, bound in decorated buckram, will be delivered to you for only \$3.00 down and \$3.00 a month for 11 months, until the full amount of \$36.00 has been paid. Cash price is \$35.00.

THE New Standard Cyclopaedia of Horticulture has been freshly written in the light of the most recent research and experience. It is not merely an ordinary revision or corrected edition of the old Cyclopaedia, but it is a new work from start to finish with enlarged boundaries geographically and practically; it supercedes and displaces all previous editions or reprints of every kind whatsoever. It is the fullest, the newest, the most authoritative of all works of its kind and constitutes the most conscientious attempt that has ever been made to compress the whole story of our horticultural thought, learning and achievement into one set of books. The owner of the Standard Cyclopaedia of Horticulture will have at hand in this work a means of quickly satisfying his need for authoritative information. It is both an Encyclopedia and a Manual. Amateur and professional alike may quickly identify any plant, shrub or fruit contained within the set, and then receive expert instructions for its cultivation.

A FEW OF THE MANY IMPORTANT NEW FEATURES

Key to Identification of Plants

This is a device to enable one to find the name of a plant. The name thus found is quickly referred to under its alphabetical location, where full information will be found in regard to it.

The key is so simple that it is useful to the veriest amateur and to the botanist or commercial expert.

Synopsis of Plant Kingdom

This is one of the most important features of the new edition. It constitutes a general running account of the classes, orders and groups of plants, with a brief sketch or characterization of 215 of the leading families, comprising those that yield practically all the cultivated plants. These family descriptions give the botanical characters; the number of genera and species and the ranges; a list of the important genera; brief statements in regard to the useful plants; and diagrammatic illustrations.

Illustrations There are 24 colored plates; 96 full page half-tones; and more than 4000 engravings which serve as guides in the text. These color plates constitute the best possible combination of expert horticultural color photography and color printing, with a mastery in selection such as only Dr. Bailey's knowledge can supply.

The publishers of THE NATIONAL NURSERYMAN have made arrangements with The MacMillan Company to supply a limited edition of this set to their readers on monthly terms—see coupon—and we can unqualifiedly recommend the work.

A Sixteen Page Prospectus will be Sent on Request

THE NATIONAL NURSERYMAN, Hatboro, Pa.

The Glossary

This is an analysis of all technical terms that are used in the work in similar works. It comprises botanical and horticultural terms with brief definitions.

Translation and Pronunciation of Latin Names

In Volume I is inserted between 2000 and 3000 words used as species—names of plants, giving the English equivalent or translation and the pronunciation.

Class Articles

Special effort has been made to secure the best cultural advices for the plants requiring peculiar or particular handling. Here are some of the titles of these articles: Ants; Autumn Gardening; Bedding; Diseases; Drainage; Floral Designs; Formal Gardening; Hotbeds and Coldframes; Insects; Landscape Gardening; Lawn Planting; Orchards; Rock Gardening; Sub-tropical Gardening; Tools and Implements; Village Improvements; Window Boxes, etc.

General Index

The final volume contains a complete index to the entire work, enabling the reader to locate volume and page of any subject he has in mind.

The National Nurseryman, Hatboro, Pa.

Enclosed find \$3.00 for which send me the "Standard Cyclopaedia of Horticulture" in buckram, and I agree to pay you \$3.00 per month for 11 months until the full amount of \$36.00 has been paid (Or cash with the order, price \$35.00).

Name

Address

Reference

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials.

Send us your want list.

Inspect our stock.

The

Established 1841

Gardeners' Chronicle

is the Leading Horticultural Journal in the World

SUBSCRIPTION IN U. S. A., \$4.20
YEARLY POST FREE

Specimen Copy and Catalogue of Horticultural Books post free on application to the publisher----

The Publishers, 41 Wellington St.
Covent Garden, LONDON, W. C.



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address

The Florists' Exchange, P. O. Box 100, Times Square Sta.

A Large Stock of

**Apple, Pear, Cherry and Peach
Grape Vines, Blackberry and
Raspberry Plants**

And a general line of ORNAMENTAL TREES and SHRUBS. All stock clean and thrifty, the best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO.

OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1919

Apple, 2 year, fine Ben Davis, Black Ben Davis, Gano, Delicious, Lowry, Rome Beauty; Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; Evergreens—Norway and Hemlock Spruce, Deodar Cedars, Irish Junipers, California Privet, 2, 3, and 4 year; Sugar Maple Seedlings, six inches to ten feet.

Write us for prices.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries
Raspberries
Blackberries
Dewberries
Berberry

Currants
Gooseberries
Grape Vines
Privet
Spirea

Rhubarb
Asparagus
Horseradish
Hardwood Cuttings
Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS

NEW CARLISLE

OHIO

We sell to THE TRADE only, and make a specialty of

**OREGON CHAMPION GOOSEBERRY
PERFECTION CURRANT
CLEAN COAST GROWN SEEDLINGS**

We also have growing for fall delivery a large assortment of general nursery stock, including Fruit, Shade, and Ornamental trees, Roses, Etc.

Head Quarters for Nursery Supplies.

Correspondence invited.

Portland Wholesale Nursery Co.

122 1/2 Grand Avenue,

Portland, Oregon

W. FROMOW & SONS

Rhododendrons, the cream of the Hardy American varieties.

Andromeda floribunda, japonica, and speciosa, bushy budded plants.

Kalmia latifolia.

Green and River's Purple Beech in all sizes up to 12 feet.

Prices and full particulars on application.

WINDLESHAM NURSERIES

Surrey, - - - England

ALL "AMERICAN NURSEYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

When writing to Advertisers please mention the National Nurseryman.

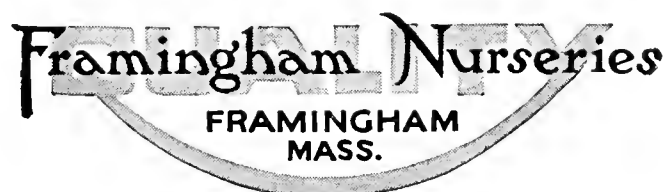
FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.



NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and

PRINTED IN ANY MANNER that may be called for

Prices as low as First-Class Work and Unequalled Promptness in

Delivery will justify.

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

CAROLINA PEACH SEED

There will be some new seed,—about 30% of a normal crop so far as reports to this date show. However, these cannot be shipped till late fall. Orders accepted with the understanding that prices will be arranged later, but they will not be cheap.

1918 crop can be shipped promptly.

Screened seed at \$4.00.

Unscreened at \$3.50 per bu. of 50 lb., sacked f. o. b. cars shipping station.

J. Van LINDLEY NURSERY CO.
Pomona, N. C.

Subscribers to Market Development Fund.

RAFFIA

SMALL SHIPMENT just received

Containing Our Usual Brands

Order at once before supply is exhausted

Thomas B. Meehan Co.

DIRECT IMPORTERS

Dresher, : : : Penna.

When writing to Advertisers please

mention the National Nurseryman.

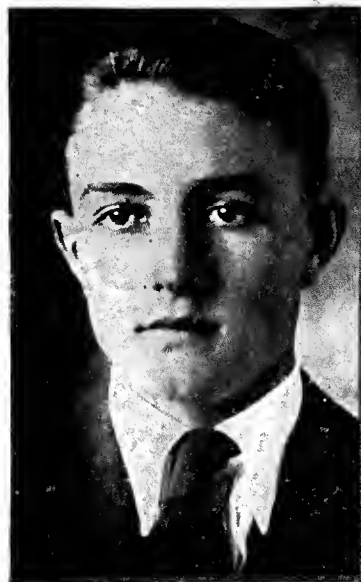
MEET US AT THE CONVENTION



Orlando Harrison



G. Hale Harrison



Henry L. Harrison



George A. Harrison

NURSEYMEN

ORCHARDISTS

BADGE NO. 2

We will gladly give you any information you may desire about our present stocks and prices. You will find it worth your while to look us up.

A partial list of what we will have to offer you:

APPLE TREES—TWO YEAR, BUDDED

Alexander	Red Astrachan
Ben Davis	R. I. Greening
Fameuse	Stark
Gravenstein	Tompkins King
Grimes	Wagner
Gano	Winter Banana
Horse	Wolf River
Jonathan	Yellow Newtown
Northern Spy	

APPLE TREES—ONE YEAR, BUDDED

Baldwin	Paragon
Ben Davis	R. I. Greening
Delicious	Rome Beauty
Gano	Stayman
Gravenstein	Wealthy
Grimes	Williams
Jonathan	Winter Banana
McIntosh	Winesap
Northern Spy	Yellow Transparent
Northwestern	York Imperial
Oldenburg	

PEACH TREES—ONE-YEAR, BUDDED

Belle of Georgia	Hiley
Brackett	Iron Mountain
Carman	Krummel
Champion	Late Crawford
Early Wheeler	Levy
Elberta	Mamie Ross
Fox	Mayflower
Francis	Ray
Greensboro	Rochester
Hale	Salway
Heath	Slappey

MAPLE, NORWAY

5000	8 to 10 ft., 1¼ to 1½ in.
6000	10 to 12 ft., 1½ to 1¾ in.
7000	12 to 14 ft., 1¾ to 2 in.
8000	14 to 16 ft., 2 to 2½ in.
9000	2½ to 3 in.
8000	3 to 3½ in.
3000	3½ to 4 in.
1000	4 inch.

HEDGE PLANTS

California Privet

5000	12 to 18 in.
5000	18 to 24 in.
5000	2 to 3 ft.
7000	3 to 4 ft.
8000	4 to 5 ft.
9000	5 to 6 ft.

SPECIMENS

2000	5 to 6 ft. high, 3 ft. broad
------	------------------------------

BARBERRY, THUNBERGII

8000	6 to 12 in.
9000	12 to 18 in.
10000	18 to 24 in.
8000	2 to 3 ft.
3000	2½ to 3 ft.

HARRISONS' NURSERIES,

Nurserymen Orchardists

BERLIN, MARYLAND

Subscribers to "Nurserymen's Fund for Market Development."

Press of Robinson Publishing Company, Hatboro, Penna.



THE NATIONAL NURSERYMAN



JULY 1919

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large assortment of high quality Nursery
Stock for the Wholesale Trade.

Fruit Trees, Small Fruits, Ornamental Trees,
Shrubs, Roses, and Vines.

A FINE LOT OF

Elm, American White, all sizes

Wanted — Hansen Hybrid Plums and Compass

Ask for Trade Lists. Write us about your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants

Everbearing and Standard

From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company

Strawberry Specialists,

Salisbury, - Maryland

Be a regular Customer, for we have a complete line of stock grown and cultivated to the highest standard, for a particular retail trade.



C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

Because

this is the age of specialists in various lines is reason enough to make us believe in specializing in the kinds of nursery stock we can grow best. But we have found that it pays too—so that is another reason.

If you had a tooth ache, you wouldn't go to a blacksmith, would you? No, indeed, you would see the best trained dentist you know.

It's the same idea.

Here are some things you will be interested in this season

ROSES	CLEMATIS
TREE LILACS	TREE HYDRANGEAS
AMPELOPSIS VEITCHII	DUTCH PIPE
PEONIES	PILOX
FLOWERING SHRUBS	

Write us about **anything** you need. Probably we can supply it. If not, we can get it for you.

Jackson & Perkins Company
Newark, - New York

(Note: Please use printed stationery or enclose business card. We sell to the trade only.)

The
Preferred
Stock

The
Preferred
Stock

Evergreens

Suitable for Delivery

Abies, Douglassi, 3 to 4 feet.

Picea Alba, 3 to 4 feet.

“ Excelsa, 2 to 3 feet.

“ “ 3 to 4 feet.

Retinispora Picifera, 3 to 4 feet.

“ “ Aurea, 3 to 4 feet.

“ Plumosa, 2 to 2½ feet.

“ “ Aurea, 2 to 2½ ft.

Thuya Columbia, 3 feet.

“ Compacta, 12 to 15 inches broad.

“ Ellwangeriana, 3 feet.

“ Hoveyi, 18 to 24 inches.

“ Siberica, 18 inches.

“ “ Lutescens, 24 inches.

Compact, well grown plants.

W. B. COLE

PAINESVILLE, OHIO

J. H. Skinner & Co.

Topeka, - Kansas



Japan Pear Seedlings.

Russian Apricot Seedlings.

Forest Tree Seedlings—Catalpa, Maple, and Locust.

Fruit Trees—Apple, Cherry, Kieffer Pear, Peach and Plum.

Rhubarb, Divided Roots, True Myatt's Linneaus.

Grapes

Shade Trees

Flowering Shrubs

Paeonias



We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock, why not write for our price list before placing your order. Our prices are low because we specialize in young stock

DISCOUNT TO THE TRADE

==

THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

When writing to Advertisers please mention the National Nurseryman.



Delicious Apple



Campbell's Early Grapes



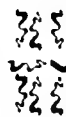
Bartlett Pear



Norway Maple



PAINESVILLE NURSERIES



July 4th

Our service flag has been put away, for most of the lads are back again on the old job. Of its twenty-seven stars, two changed from the blue to gold.



TREES

PLANTS

SEEDS

We are all mighty glad the war is over; and this year at least, will celebrate the 4th in the good old-fashioned way with lots of bang, fire and hilarity.

In the matter of buying Nursery stock, however, it is better to be "safe and sane."

Many a careless purchaser has burned his fingers, or got hit in the eye by "the stick."

We will now blow our own trumpet. We prefer to do it ourselves; for we need the exercise, and know best what we are blowing about.

That part of our 1200 acres devoted to growing hardy nursery stock, is looking fine. We are going to have a splendid lot of first class stock to offer this fall.

The Rose fields are a mass of bloom, wood developing rapidly, and giving promise of exceptionally strong plants for digging time.

Good growing temperatures and occasional rains are making first class trees in all lines of fruit.

So much for quality prospects. You all know that for various definite reasons, demand will generally exceed supply.

Our representatives had the pleasure of meeting personally a good many nurserymen in Chicago. We will be glad to meet your Want Lists also.

The Storrs & Harrison Co.

NURSEYMEN - FLORISTS - SEEDSMEN

PAINESVILLE, OHIO

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

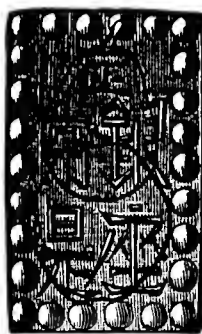
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

73 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

*Our usual general assortment
of Nursery Stock to offer
for Fall 1919*

**APPLE
PEACH
CHERRY
PLUM
SHRUBS
VINES, Etc.**

Head quarters for Norway Maple
and American Elm.

C. M. Hobbs & Sons
Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

We are pleased to offer for Spring or Fall:

CHERRY, 2 year X X 1 inch up, also $\frac{3}{4}$, $\frac{5}{8}$ and lighter grades.

CHERRY, One year $1\frac{1}{16}$ up, $\frac{5}{8}$ & $\frac{1}{2}$ to $\frac{5}{8}$

Our Blocks of Cherry are largest to be found in U. S. We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment. Grafted Hardy Northern Pecans.

Car Lots a specialty, also fair assortment of Ornamentals.

Subscribers to "Nurserymen's Fund for Market Development."

Hill's Evergreens

SINCE 1855

Complete stock of leading varieties in Firs, Spruce, Pines, Arborvitae's, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

The D. Hill Nursery Co., Inc.

Evergreen Specialists.

Largest Growers in America.

Box 401, Dundee, Illinois

FAIRFIELD NURSERIES FRUIT AND SEED FARMS

I have sold all the stock I will have this Spring, but this Summer I will be ready to book orders for Fall, 1919 and Spring 1920 delivery.

The war is over and good times are ahead. No more guns or ammunition will be needed, but you will want more of my Grape Vines, Scarlet and Crimson clover and Cow-Peas than ever before.

Keep me in mind.

CHAS. M. PETERS

P. O. Address Salisbury, Wicomico County, Maryland.

Long Distance 'Phone and telegraph, Salisbury, Maryland.

THE WESTMINSTER NURSERY J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Fall 1919

250,000 Cal. Privets in grades, 1, 2, and 3 yrs.

300,000 Asparagus, 2 and 3 yr., Asst.

Barberry Thun., 18-24 in. and 2-3 ft.

Lombardy Poplars in grades 6 to 16 ft.

Oriental Planes in grades 6 to 12 ft.

Tulip Poplars, 6-8 ft.

Horse Chestnuts in grades 7 to 12 ft.

Catalpa Speco in grades 8 to 12 ft.

Butter Nuts 4 to 8 ft., in grades.

Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft., Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft. and 4-5 ft., Hydrangeas P. G., 2-3 ft. Write for Prices.

Peterson's Guaranteed Peonies and Iris

Our Guarantee

We will replace with three every plant blooming untrue to description.

Send for descriptive price-list just issued.

Peterson Nursery

30 N. La Salle St.

Chicago, Illinois

We are now ready to quote lowest prices on FRUIT, SHADE AND ORNAMENTAL TREES, SHRUBS, EVERGREENS, VINES and HERBACEOUS PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries Sparta, Ky.

For FUMIGATION With HYDROCYANIC ACID GAS "CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

BAILEY'S STANDARD CYCLOPEDIA OF HORTICULTURE

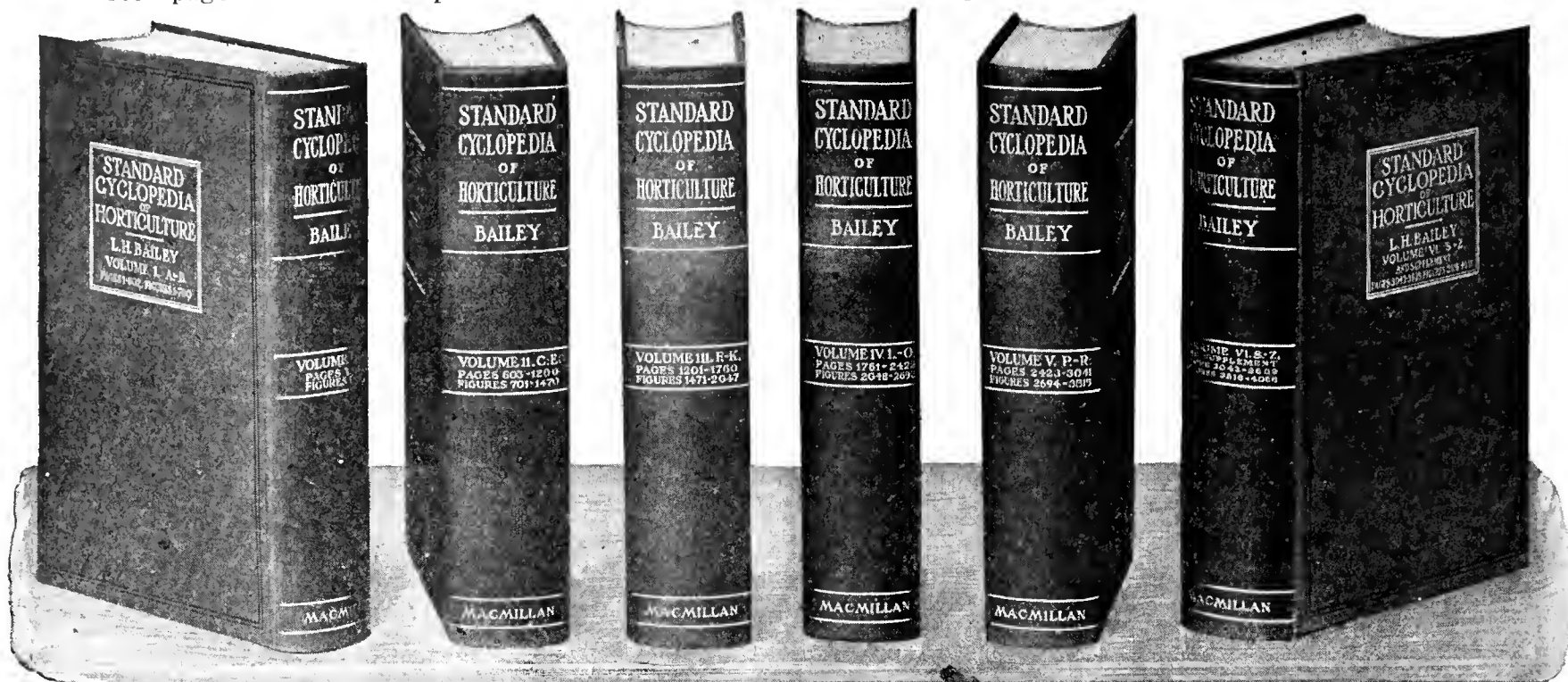
More than
3600 pages

24 full page
exquisite
color plates

96 beautiful
full page
halftones

More than
4000 text
engravings

Approximately 4,000 genera,
20,000 species and
40,000 plant names



The complete set of six volumes, bound in decorated buckram, will be delivered to you for only \$3.00 down and \$3.00 a month for 11 months, until the full amount of \$36.00 has been paid. Cash price is \$35.00.

THE New Standard Cyclopedia of Horticulture has been freshly written in the light of the most recent research and experience. It is not merely an ordinary revision or corrected edition of the old Cyclopedia, but it is a new work from start to finish with enlarged boundaries geographically and practically; it supercedes and displaces all previous editions or reprints of every kind whatsoever. It is the fullest, the newest, the most authoritative of all works of its kind and constitutes the most conscientious attempt that has ever been made to compress the whole story of our horticultural thought, learning and achievement into one set of books. The owner of the Standard Cyclopedia of Horticulture will have at hand in this work a means of quickly satisfying his need for authoritative information. It is both an Encyclopedia and a Manual. Amateur and professional alike may quickly identify any plant, shrub or fruit contained within the set, and then receive expert instructions for its cultivation.

A FEW OF THE MANY IMPORTANT NEW FEATURES

Key to Identification of Plants

This is a device to enable one to find the name of a plant. The name thus found is quickly referred to under its alphabetical location, where full information will be found in regard to it.

The key is so simple that it is useful to the veriest amateur and to the botanist or commercial expert.

Synopsis of Plant Kingdom

This is one of the most important features of the new edition. It constitutes a general running account of the classes, orders and groups of plants, with a brief sketch or characterization of 215 of the leading

families, comprising those that yield practically all the cultivated plants. These family descriptions give the botanical characters; the number of genera and species and the ranges; a list of the important genera; brief statements in regard to the useful plants; and diagrammatic illustrations.

Illustrations

There are 24 colored plates; 96 full page half-tones; and more than 4000 engravings which serve as guides in the text. These color plates constitute the best possible combination of expert horticultural color photography and color printing, with a mastery in selection such as only Dr. Bailey's knowledge can supply.

The publishers of THE NATIONAL NURSERYMAN have made arrangements with The MacMillan Company to supply a limited edition of this set to their readers on monthly terms—see coupon—and we can unqualifiedly recommend the work.

A Sixteen Page Prospectus will be Sent on Request

THE NATIONAL NURSERYMAN, Hatboro, Pa.

The Glossary

This is an analysis of all technical terms that are used in the work and in similar works. It comprises botanical and horticultural terms with brief definitions.

Translation and Pronunciation of Latin Names

In Volume I is inserted a list of between 2000 and 3000 Latin words used as species—names of plants, giving the English equivalent or translation and the pronunciation.

Class Articles

Special effort has been made to secure the best cultural advices for the plants requiring peculiar or particular handling. Here are some of the titles of these articles: Ants; Autumn Gardening; Bedding; Diseases; Drainage; Floral Designs; Formal Gardening; Hotbeds and Coldframes; Insects; Landscape Gardening; Lawn Planting; Orchards; Rock Gardening; Sub-tropical Gardening; Tools and Implements; Village Improvements; Window Boxes, etc.

General Index

The final volume contains a complete index to the entire work, enabling the reader to locate volume and page of any subject he has in mind.

The National Nurseryman, Hatboro, Pa.

Enclosed find \$3.00 for which send me the "Standard Cyclopedia of Horticulture" in buckram, and I agree to pay you \$3.00 per month for 11 months until the full amount of \$36.00 has been paid (Or cash with the order, price \$35.00).

Name

Address

Reference

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

FALL 1919—SPRING 1920

STRAWBERRY PLANTS

All of the best Standard and Everbearing varieties, we will ship to you, or direct to your customers under your tag. Plants guaranteed strictly first class and true to-name, all New Land grown. We tie in bundles of 26 for 25 and pack in ventilated boxes with damp moss. If you need 100 or 1,000, 000 strawberry plants get in touch with us in regards to supply before we book our entire stock.

We are located in the largest strawberry center in the world and have the soil and climate to produce the best in strawberry plants.

From Connecticut

Gentlemen: We wish to thank you for your prompt handling of our spring strawberry orders, and assure you that your services are very much appreciated.

From Pennsylvania

Dear Sirs: Your shipment of the 21st arrived in due time and everything is satisfactory. I admire your careful packing. Will in a few days forward you another large order.

We also offer a good stock of asparagus roots 1 and 2 year, grape vines 1 year, California Privet 1 year, Barberry T. 2, 3 and 4 year, Silver Maples all sizes from 6 to 12 feet, Flowering shrubs and Evergreens.

Let Us Price Your Wants.

We are in the market for peach, plum and cherry trees, what have you to offer

Bunting Nurseries,

G. E. BUNTING & SONS
Selbyville—Delaware

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing

Ask for Prices. We are the printers of this Magazine

TO LANDSCAPE MEN AND NURSEYMEN

You will miss something if you don't take advantage of my popular priced landscape photograph service. I give names and numbers of plants with a good number of the views. I have sets showing before and after effects with plans worth \$50 at \$5.

B. F. CONIGISKY 416 Jefferson St., Peoria, Ill.

Get Bigger and Better Mail Returns From Your NURSERY CATALOGS

by having them profusely illustrated and well printed. Use the colors of nature on the covers. To accomplish this, place your printing order in the hands of nursery catalog and color printing specialists who will plan your catalog, furnish all the illustrations and color plates, and charge but a fair price for the printing. Now is the time to place your order, as our capacity has its limits. Write right now. Estimates and dummies furnished without any obligation incurred.

CAMPBELL-JOHNSON PRINTING CO.

Tenth and Walnut Streets - - DES MOINES, IOWA
PRINTERS TO THE NURSEYMEN OF AMERICA

HAVE YOU SEEN

AND EXAMINED THE QUALITY
AND FINISH OF OUR

Rawhide Brand of Shipping Tags and Tree Labels

PRINTED OR PLAIN, STRUNG OR WIRED?



This stock is especially adapted to the most severe usage, being thoroughly waterproof and weather-proof.

"Once used always used."

Send for samples and prices. Our references are the largest nurserymen in the United States.

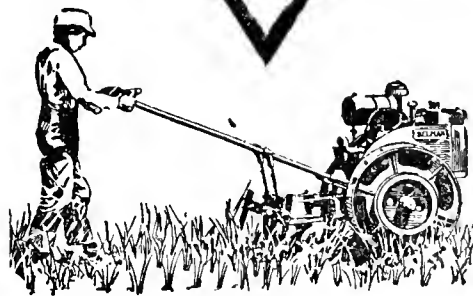
The Denney Tag Co.

West Chester, Pennsylvania

BEEMAN GARDEN TRACTOR

It Plows, Cultivates, Harrows, Mows, Does 1 horse work at 1/2 horse cost. successfully operated by unskilled labor. Thousands of pleased users. Does not pack ground. Turns sharp corners, goes close to fences. Useful the yr. around.

\$285
f. o. b.
Factory



A 4 h. p. Engine

Runs cream separators, washing machines, pumps, etc.

Write for interesting free booklet

Beeman Garden Tractor Co.
322 Sixth Avenue
South Minneapolis, Minn.

IBOLIUM

THE NEW HYBRID

To be sent out in Fall 1919.
THE ELM CITY NURSERY CO.

HARDY PRIVET

(L. Ibota x Ovalifolium)

More about it later.
Woodmont Nurseries, Inc.

Introducers of BOX-BARBERRY
NEW HAVEN, CONN.

When writing to Advertisers please mention the National Nurseryman.

You Are Invited

All Nurserymen are cordially invited to call at our Nurseries any time this summer. We are always "at home." Our stock is open for inspection any time by anybody.

LOCATION:—Just half way between New York and Philadelphia: an hour and a half ride. Call us on the phone (Monmouth Junction 241) from either city, tell us what train you are taking and we will meet you at the station. Nurserymen who pass thru New Jersey over the Lincoln Highway can see our nurseries just outside of Princeton. Stop in and see us.

Just cut out this advertisement and keep it handy when you take that trip this summer. It will be a good investment for you to see "Princeton Products" where they are made.

Princeton Nurseries

Princeton - New Jersey

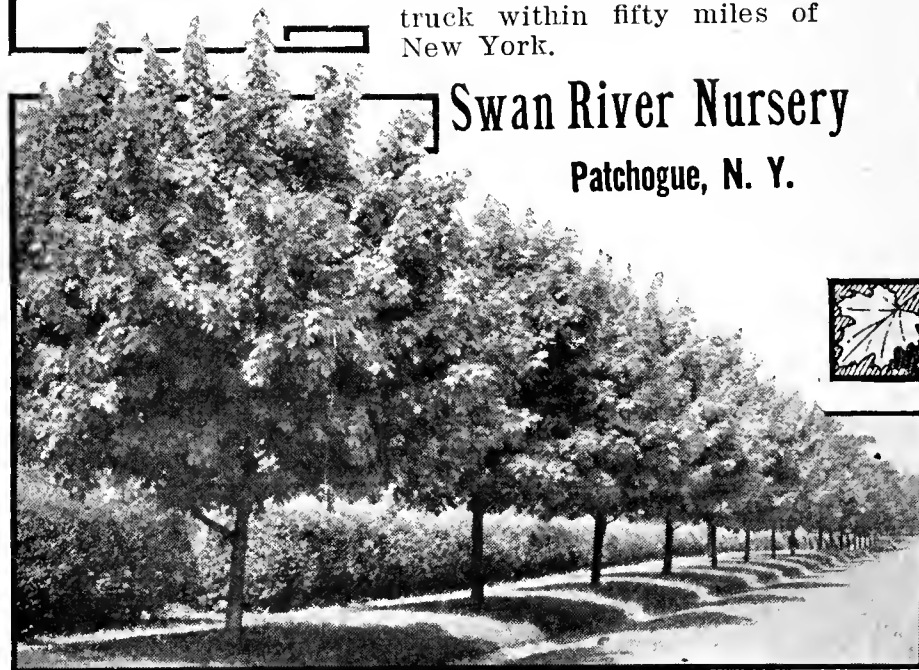
July first, nineteen-nineteen.

What Do You Say

when your customers come to you and ask for shade trees? You should know what is best suited to their needs, and your selection should be made with care. Nurserymen who are wise usually advise

Norway Maples

for, being wise, they have purchased their trees from us and know that for dense shade our Norway Maples can't be excelled. Their straight trunks furnish beauty; their thick foliage, utility. We can furnish them with trunks from 1 to 3½ inches caliper, and deliver them by motor truck within fifty miles of New York.



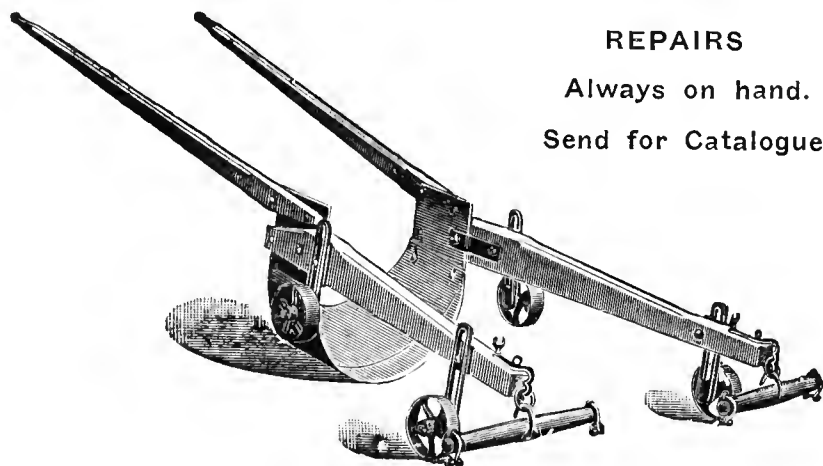
Swan River Nursery

Patchogue, N. Y.

1857

1919

BRAGG'S COMMON SENSE TREE DIGGER



REPAIRS
Always on hand.
Send for Catalogue

Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.

KALAMAZOO, MICH.

Ornamental Nursery Stock

TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS PLANTS

Large assortment. Long list of varieties and sizes.

Get our New Trade Catalogue,—ready September.

Spring price list out of date.

Thomas B. Meehan Co.

WHOLESALE NURSERYMEN,

DRESHER

PA.

Subscribers to "Nurserymen's Fund for Market Development."

CHAMPION NURSERIES, Perry, Ohio

Offer the Following Stock

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6. to 8 ft., 8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4 ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet, California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERYSTOCK

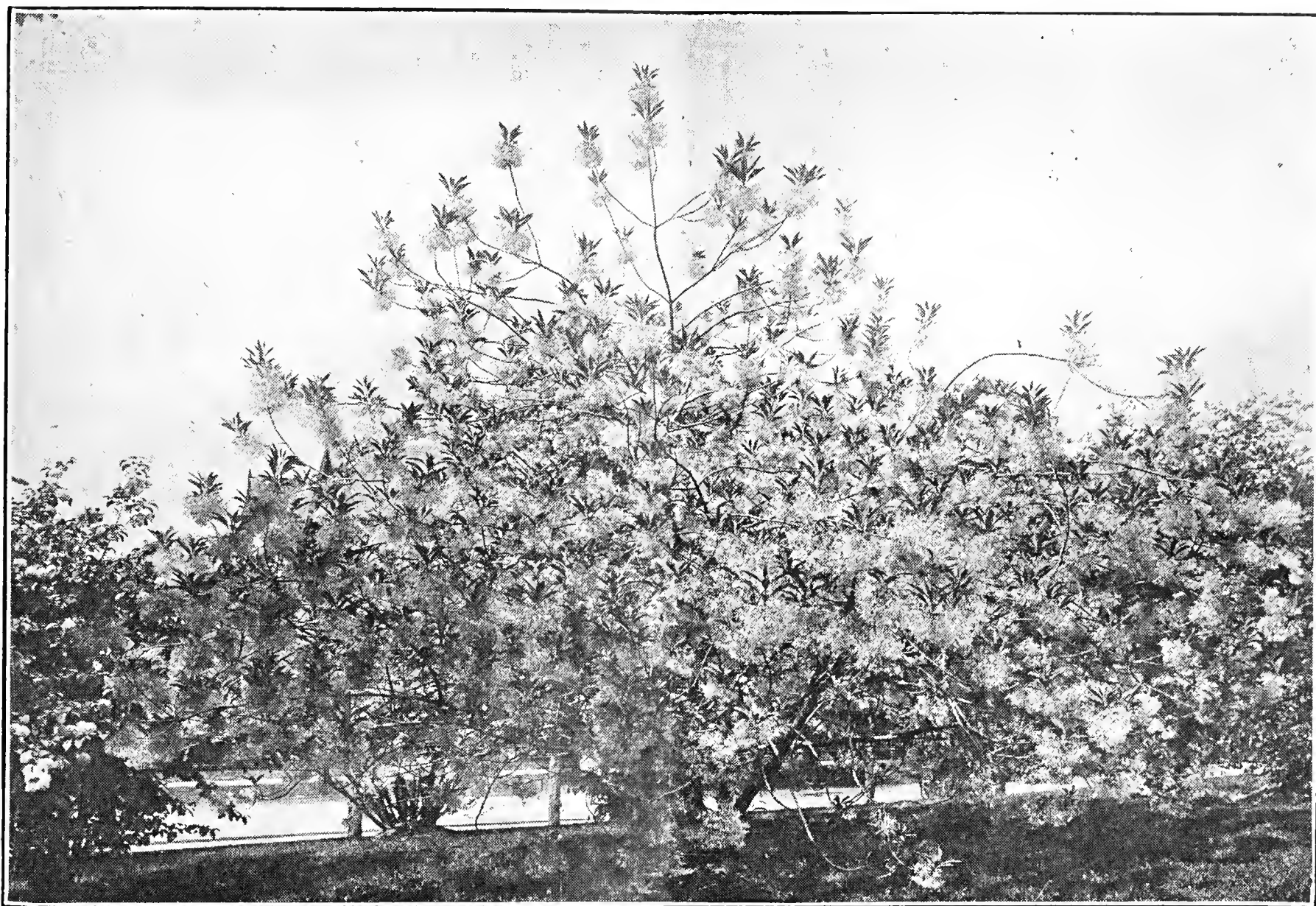
The National Nurseryman Publishing Co., Incorporated

Vol. XXVII

HATBORO, PENNA. JULY, 1919

No. 7

Chionanthus Virginica



Chionanthus Virginica, White Fringe in full bloom, just as the leaves are expanding

The *Chionanthus Virginica* (White Fringe) is one of the good things among the larger growing flowering shrubs. It grows almost large enough to be classified among the trees, often forming a trunk 4 or more inches in diameter. The habit, however, is invariably bush form. The illustration is fairly representative of it and shows a fine specimen covered with fringe-like flowers which hang in racemes or clusters. These come out just in advance of the leaves.

The plant is a desirable one in many ways. In addition to its blooming qualities it has large handsome leaves and always looks rich and good all through the season. Toward fall the female plant bears clusters of black berries, which are about the size of currants. They cannot be counted upon, however, as ornamental features, because the birds are so fond of them. They rarely let them ripen. Naturally it prefers a damp situation, but

does not seem at all particular, being adaptable to almost any good soil or position.

Owing to its height and vigorous growth it is well to put it in the background when grouped with other shrubs, but as per our illustration it makes a very fine solitary or single specimen for the lawn. Considering its many qualities it is a wonder it has not become more common in nurseries and pushed harder by the trade. The best way to propagate it is by seed, which should be sown in the fall, or if kept over until spring it should be stratified to prevent drying out.

It may also be increased by layers or in budding or grafting upon the Ash. In Europe the *Fraxinus ornus* is the stock preferred. When grown from seed it seems to be slightly variable, many forms, differing slightly, will be noticed, but none to the writer's knowledge have been considered worthy of naming and propagation by the

horticulturist. It is, however, a plant that suggests itself as one of great possibilities for improvement. Doubtless the future will see named varieties when the hybridist or specialist begins to work upon it.

The staminate form, or male plant, has the showiest flowers, as the petals are broader and whiter, but of course, it lacks the attractive pendulous blue fruits of the female or pistillate plant, which are very attractive if

overlooked by the birds in the autumn.

The bark and roots are in great demand by the drug men, as it has a medicinal value.

From a cultural standpoint it is hardy as far north as Massachusetts, although it is one of those plants that occasionally gets injured in winter if the situation does not suit it, even as far south as Philadelphia or Washington.

Forty-Fourth Annual Convention

As early as Sunday, June 22, visitors to the Forty-fourth annual convention of the American Association of Nurserymen began to arrive at Hotel Sherman, Chicago. By Monday the nurserymen were there in strong force, renewing acquaintances, holding committee meetings and getting things in shape for the opening of the convention.

Due to the seedsmen's and other conventions being held at the same time the hotel was too crowded for comfort and late arrivals, who had not made reservations had much difficulty in procuring accommodation.

Reports from all sections agreed that the past season's business had been good and the nurserymen were correspondingly cheerful. While all seemed optimistic about the future, no one seemed to be quite sure of what was ahead and all recognized the present condition as what is best described as a state of flux.

It was a business gathering in every sense of the word and all seemed to be on the job every minute. Entertainment such as side trips and jollification of earlier conventions were entirely missing and had given place to serious business action.

At the various discussions it was interesting to note the old conservative element gradually giving way before the progressive spirit that seemed to pervade the meeting.

There was an evident desire to get down to brass tacks and act, and an anxious desire to follow a good leader.

The opening session was called to order by President Mayhew. It was well attended over 180 having registered up to that time.

The address of welcome was made by William R. Moss of Chicago Association of Commerce, and was ably responded to by M. R. Cashman, Owatonna, Minn.

Thursday morning's session was very well attended, the audience listening with great attention to the address of E. G. Hill, Richmond, Ind., on the "Propagation and Growing of Roses."

After such an address by the Dean of Rose Growing, Robert Pyle and J. Horace McFarland did not let the opportunity slip by, to boost for the National Rose Society.

They pointed out the bright future of this particular branch of our business, the activities of the Rose Society, the cutting off of imports, the Market Development added to the established popularity of the Rose were going to create an enormous demand which it was up to the nurserymen to help to supply.

Charles L. Saybold, Forester, Department of Parks,

Wilkes-Barre, Pa., read a paper on "The Growing and Preparation of Evergreens for Landscape Planting."

Although not on the program, at the invitation of President Mayhew, Dr. Marlatt, Chairman of the Federal Horticultural Board was present at Thursday morning's session and addressed the nurserymen on the subject of quarantines.

He ably presented the government's side of the subject, pointing out that the quarantines as they affected nursery interests were only a very minor part of the whole scheme for the protection of the horticultural, agricultural, and forestry interests of the country. The Doctor disclaimed any intention of the government to institute progressive quarantines that would ultimately put the nurseryman out of business. While he favored Federal control of interstate commerce in this respect, so as to get a uniformity in the state laws, he doubted if congress would ever consider it, on account of the cost it would involve.

Dr. A. F. Woods, President Maryland State College of Agriculture, College Park, Md., followed Dr. Marlatt with an address on "The Nurseryman's Opportunity in Reconstruction," and urged nurserymen to take more advantage of their state colleges, making a fitting close to the address of Dr. Marlatt.

Dr. Wood's address left a distinct impression that it is up to the nurserymen and horticulturists of the country to take the control of their business into their own hands, not by opposing the legislation that was in motion to help them, but by education through the schools, colleges, and universities that will bring the nurserymen into those positions where they will help to frame the laws.

The point was well driven home, to those who properly applied it, by his advice to use horse sense namely, the sense that a jackass cannot acquire.

PRINCETON NURSERIES

John Watson has withdrawn from the management of the Princeton Nurseries. Mr. William Flemer, Jr., recently returned from France, will take charge, Carl Flemer managing the nurseries at Springfield.

President's Address

Gentlemen of American Association of Nurserymen:

I am reminded of a statement made to me some years ago by a friend who had been invited to deliver an address on a very important occasion, to this effect, "I would give almost anything to be able to say what is in my heart today and to say it in a way that every man and woman in my audience would understand." I am sure that every public speaker feels something of this every time he speaks, but there are times which call for the supreme effort of one's life because that particular opportunity will not come in just such fashion again. I wish, therefore, my friends, that I might today speak concerning the things which are of mutual interest to us and with the mind, heart, and tongue of a prophet, for I am persuaded that if we fail to avail ourselves of the opportunity which this hour brings to reconstruct our business along lines of service to ourselves and to the public not heretofore approached; if we fail to take cognizance of the fact that this is a great hour in the progress of the world and that the industry here represented has a real part in this hour of reconstruction; we will miss the greatest opportunity which ever came to us and one which will not come again.

He who receives at the hands of his fellows such signal honors as I have received from you, receives as well serious obligations, and I have been decidedly more concerned about the latter than the former, and because this is true, I ponder well the things which I would say on this occasion. Under our constitution, the presidency of this Association, aside from the great honor, makes the incumbent chief executive of the most important horticultural body in the world, and representative of a great industry in which is invested millions of dollars. Through the exercise of his office, he comes to feel a "fatherly interest" in every nurseryman of America, because he has in a peculiar manner come into possession of facts concerning our problems hitherto unknown, because he has assiduously studied these problems from a different angle to that formerly, and from the vantage ground of the mountain tops of a new experience. Through this experience, he comes to desire in a very peculiar and unselfish way the success of every member of this Association and to plan to that end. If, therefore, following in the well-beaten path of my predecessors, I bring to you recommendations which are general, definite, and profuse, will you not judge all in a spirit of tolerance and in the knowledge that in such recommendations I am striving to serve your best interests. Might I say right here that in view of the fact this address was prepared before coming to the convention, very naturally due recognition of recommendations of the Executive Committee are omitted, and such recommendations may or may not be in accord with my address. For practically two years, one as acting president and one as president in fact, I have served you as efficiently as circumstances, coupled with my limited ability, would permit, but I could have done some things for you which I have not done had you not withheld, for a time at least, the plans I presented to you a year ago for an organization competent to accomplish the task of caring for your interests. In the knowledge gained through these years of study of your problems, I am confident that your best interests will be served by the adoption of an order directing your Executive committee to provide such organization as will do for you everything that such an organization can do.

A year ago in the adoption of amendment to constitution you made ample provision for financing a competent business organization, and this will be evidenced by reports which your Secretary and Treasurer will make. It is gratifying indeed to

note that whereas a year ago your treasury was in a depleted condition, the cash balance in bank today is adequate to meet the demands which may be made on the treasury for another year. Word has come to me from a few members with suggestions that we return to the old plan of \$5.00 per year membership fee, that we are going at too rapid a gait for staid old nurserymen, but such a thing is, to my mind, unthinkable. Having put our hand to the plow we are not going to look back, we are going forward, and we are going to make the nursery business of America more profitable and more serviceable than has been true of the past. It can be done and I believe it will be done. I therefore urge that at this convention you direct the Executive Committee to expend the funds of your treasury in providing a thorough business organization. Return to the old regime! Not in a thousand years. We had "the flesh pots back there in Egypt," were we satisfied? At Detroit in 1915 the nurserymen burned their bridges behind them and launched out upon a comprehensive business program and every day since has been one of progress. In the light of what has been accomplished during these four years, who will say that the reorganization in 1915 was unwise? The season just ended has been the most profitable in many years and the future is bright with promise, then why should we not go forward?

Our memory is treacherous. If the conditions of the present had obtained in 1915, there would have been no occasion for a reorganization, but history will repeat itself and conditions like those of 1915 will return, like Banquo's ghost, to haunt us. Our success of the present, if not safe-guarded, creates a menace supreme. Good nursery stock for the fall of 1919 and spring of 1920 will sell at prices hitherto unknown. In fact it is no longer a matter of prices, but rather a matter of procuring stock at any price. This leads me to say that the solemn duty of every member to-day is to cooperate with every other member in an endeavor to make the limited supply serve the unprecedented demand. Turn your surplus to the man who needs it, and in the transaction remember that the retail nurseryman has been in the past and will be in the future your best customer. This condition of shortage will most probably obtain for two or three years, then look out. Stimulated by high prices, enormous plantings will be made, and about the year 1922-23 the bottom will drop out unless the whole matter can be safe-guarded. You who believe "this thing will take care of itself," mark my words. In about the year 1923 you will be crying for somebody to help you turn loose that bear of overproduction, unless, as I have already intimated, we are able to work out some plan which will obviate, in a measure at least, this matter of overproduction. I believe, furthermore, that this is the psychological hour to accomplish something definite in standardizing prices. Stock is worth today what it should have been selling for all these years, and represents at present prices better values than is true of any other commodity on the market. If you do not believe this is a fact, make a table of comparisons between nursery stock and almost any other product you can imagine, and you will be convinced that the statement just made is true. With a competent organization to direct in an educational way both production and distribution, we should make secure for the future the success of the present. Because the details of the management of the Association's affairs are very wisely committed to the Executive Committee, I will not elaborate the suggestion I again make for a more effective organization, but, having served as a member of this Committee since our reorganization in 1915, I know the Committee

will welcome an expression of your wishes here as well as elsewhere. Direct the Committee to go forward and they will build an organization capable of rendering you the most efficient service.

SECRETARY'S OFFICE

A year ago your Executive Committee engaged the services of Mr. Charles Sizemore as Secretary-Traffic Manager at a salary of \$1500.00 per annum. One of the duties of his office has been that of auditing freight and express bills of the members, and in the discussion of the possibilities of this feature of his work with the Committee, I stated that if the membership would cooperate with this new office by filing with Mr. Sizemore their old freight and express bills, under the proposed plan of 15% of the claims collected to go into our treasury, 10% to the Secretary, and 75% to the member owning the claim, the amount designated as the treasury's funds would largely pay the Secretary's salary. How well my prediction has been verified is best told by the figures taken from the Secretary's books on June 1st.

Total claims collected	-	-	-	\$7539.08
Serving a total of 29 firms and distributed as follows:				
Funds returned to the members	-	-	-	\$5654.31
Funds returned to the treasury	-	-	-	1130.90
Charles Sizemore's commissions	-	-	-	753.87

In other words, on June 1st, the salary for the year paid to the Secretary had been returned to the treasury with the exception of \$369.10, and only twenty-nine firms out of a total of four hundred had made use of this service. It can readily be imagined what the possibilities of this office would be if the entire membership would use the services offered, which, by the way, are cheaper by 10% than the same service offered by auditing firms generally. I think, gentlemen, I could not bring you better evidence of the possibilities of organization than is shown by this report. The very fact that has been demonstrated in digging good money out of old freight bills is true all along the line if we would go after it. I want to take this opportunity to say that Mr. Sizemore has served this Association with all the ability and loyalty he possesses, and you will be pleased, I am sure, with the report he brings you. Furthermore, I want to express my appreciation of the able assistance he has rendered my office during the year just closing.

MEMBERSHIP

Fear was expressed quite generally a year ago that many of the larger firms would forfeit their membership rather than pay the advanced dues, and it is gratifying to be able to report that not only has this not been true, but a larger percent of the members have paid their dues under the present schedule than on corresponding date of recent years. The last information coming to my office on June 16th, was that only fifty-nine members had failed to report, and not one of these was among the large contributors. In view of the fact that quite a large percent of the membership have in the past paid their dues during the convention, this report is most gratifying. The increase of membership fees and dues over the old schedule is approximately 100% as a whole, and altogether represents as fair and equitable a basis of taxation as could reasonably be hoped for. As I have already stated, I believe the present basis will provide adequate funds for taking care of the Association's affairs in a creditable manner, and, as far as I have been able to learn, this basis is, with very few exceptions, satisfactory to the membership. It is not so much a matter, after all, of what a thing costs to-day as it is the service rendered, and this is peculiarly true of membership in this Association. This membership can be made worth much more than our present schedule suggests, and if we do not get "cold feet" it will not be many years before membership becomes so valuable that every eligible nurseryman in the entire country will be begging for admittance, without regard to the cost. My hope is that we may leave the schedule of dues where it is and that we may raise the standard otherwise until membership in the American Association of Nurserymen

will represent all that is best and nothing that is bad in American horticulture.

COUNSEL'S OFFICE

A year ago this question unfortunately developed certain personal applications which were certainly not justified and which retarded our work for one year. Some of us doubted the wisdom of the present policy as it relates to retaining Counsel at a salary of \$4800.00 per annum and \$25.00 per diem and expenses while away from his office, while others of us held to the opinion that a different policy would best serve the Association's needs. I hope I may be understood when I say that there is the best of feeling between the President and the Association's Counsel, and that the personality of no man should be allowed to enter into our discussions here. It is simply a matter of Association's policy as it relates to one of its officers, and if we are to continue our present policy, personally, I had rather have Curtis Nye Smith as Association's Counsel than any other man I know. In view of the fact that the Executive Committee has been criticized by some for this expenditure, I am confident that in their report the Committee will ask for your direction as it relates to the future of this office. I am mentioning the office of the Association's Counsel in my report only to get the whole matter before you and that you may consider what I say in connection with the report of the Executive Committee.

CREDIT AND COLLECTION BUREAU

As will be shown in Counsel's report, this department has shown substantial growth from the beginning and, notwithstanding the conditions of last season, shows a net increase in revenue over year ending June 1918. It is unfortunate that more members do not use this department, and it is also unfortunate that more members do not avail themselves of Counsel's advice which is free to the membership. If we are to continue our present policy as it relates to this department, in justice to Counsel as well as ourselves, we should avail ourselves of the service offered which, under present plans, is paid for.

LEGISLATION

The question of legislation will very properly be covered in detail by reports from your Legislative Committee and Counsel, but there is one feature of legislation which I think it not out of place to be mentioned here, that relating to Quarantine Order No. 37.

QUARANTINE ORDER NO. 37

First, may I say that the American Association of Nurserymen has a right to speak for the nurserymen of America, and it is the only organization in the country that has that right. I do not agree with my friend, the editor of the American Nurseryman, that this Association "represents one-fifth of the nurserymen of this country." I am cognizant of the fact that there are a great many small nurserymen who are not members of the Association, but I feel secure in the statement that any action of this body represents in a definite way the nursery interests of America, for the very obvious reason that this membership represents most probably 90% of the money invested in the business in America, and holds within its hands a large majority of the annual business in nursery products. This position is recognized by all, because no other body or individual makes any special effort to shape the destinies of the nursery business along national lines. In the light of this reasoning, a number of unfortunate things have been said through the press and otherwise, and a number of unfair criticisms have been made, both pro and con, through periodicals in no wise authorized to speak for the American Association of Nurserymen, relative to the position taken by your officers before the Federal Horticultural Board in the matter above referred to. My good friend, the editor of the American Nurseryman, a prince of good fellows and a man who labors in season and out for the upbuilding of the nursery interests, has allowed his enthusiasm for exclusion of foreign grown nursery stock to lead him into a discussion of the question from a point of view hardly fair to the officers of this Association.

In the June issue of this periodical, under the caption, "No Right to Misrepresent," the following quotation from "a well known nurseryman" appears: "Import nurserymen and jobbers, in their efforts to have the law rescinded, have no right to misrepresent the attitude of the majority of the nurserymen who are growers and who welcome exclusion." This statement, gentlemen, is manifestly unfair to the officers of this Association and misrepresents the pronounced attitude of this body. What are the real facts in the case? In 1917, your Executive and Legislative Committees, anticipating the action of the Federal Horticultural Board in regard to plant exclusion, brought the whole matter before you in their report and asked that you direct them, and I hereby remind you that you directed your officers by adopting unanimously the following resolution: "Resolved that the Executive Committee recommends that the Association do not approve of the exclusion of foreign grown nursery stock, but that the subject be referred to the incoming Executive and Legislative Committees with power to act." On page 123 of the report of proceedings of the Philadelphia convention, after a full discussion of the matter, this statement appears: "The resolution recommended for adoption by the Executive Committee being before the convention, there being no further discussion, was unanimously adopted." Now, how does the propaganda disseminated at Washington by members of this body "that the Executive Committee, through its Legislative Committee and Counsel, represent special and selfish interests at Washington rather than the majority of the nurserymen of this Association," square with the last word you have spoken on this subject? You stand pledged, by unanimous vote, against plant exclusion, and if you have changed your mind it is entirely in order to rescind your former action. Your will in this or any other matter is law unto your Executive Committee, and until you delegate authority to some one else, let it be understood that no individual or corporation has authority to speak for this Association. When it becomes necessary for your officers to present any question affecting the policies of this Association, they should have the unqualified support of members, particularly when they are acting under direct orders from the Association. Personally, and as chairman of the Executive Committee, I take the responsibility of directing the Legislative Committee to oppose this quarantine order, not because I thought the order wise or unwise, fair or unfair, but because I was pledged to carry out your expressed will. The action of the Committee, gentlemen, is absolutely in the clear, and any discussion of the matter should, in justice to all, be founded upon the resolution referred to. If you are now of a different mind to that expressed at Philadelphia two years ago, rescind your former action. In dealing with questions of legislation in general, I firmly believe we can make some improvement, and I shall make certain recommendations to the Executive Committee thereon which I hope may come before you in the form of recommendations. There is one other thing I want particularly to say, and that is that in the minds of quite a few of us there is a feeling that the interests of the nurserymen and our law-making bodies are antagonistic, and this, in a large measure, is as untrue as it is unfair.

WASHINGTON OUR FRIEND

Right here allow me to say that in the conduct of negotiations at national and state capitals we are not dealing with enemy aliens, but with Americans who have American interests at heart and who are our friends, and I believe it is time for us to take cognizance of this fact. Our differences are most often the result of a different view point, and I suspect the other fellow is as often right as are we. If what we want is right and we go after it in the right way, there are not many times we do not get it, and I remember, and so do you, some things we have asked for that should have been and were denied us. Washington knows more about our business than we do, more about some of our policies than we think they know, and if we will set to work to clean house from cellar to garret, if we will drive out of our

councils men of questionable character and policy, we will find less occasion to defend our policies before law-making bodies and will have better success in our pleadings. The reason we have to fight such legislation as the Arkansas fraud act before legislative committees is because of the fraudulent practices on the part of a large element of dealers in our products, and because we have countenanced this thing, and because we have associated with the "gang," no distinctions are drawn. I want you to get this: we can make the membership of A. A. of N. stand for 100% in efficiency, service, and character, and when we do we can send a committee of laymen to Washington or into the legislative halls of any state in the union, and they will be heard, not for their much speaking, but for their honesty of purpose. We often find ourselves in a very embarrassing position defending the "gang" before legislative bodies, which reminds me of a story I heard the other day and which illustrates my point. A certain Jew down in my state left a very important case in the hands of his lawyer and went to California for his vacation. In the course of time a verdict was rendered in the case and the lawyer wired his client as follows: "Justice has triumphed." Immediately the Jew wired back: "Appeal the case."

LABOR

Probably the greatest problem confronting the world at this hour is labor, and there is no industry in all the land more vitally interested than are you gentlemen who sit before me. For some years there has been growing up in this land of ours an unfortunate antipathy between the forces of capital and labor, and every hour is full of forebodings as we bring our minds to contemplation of this gigantic question. A review of history shows us that the present wage system is but one of the stages in the evolution of the world, and in the mind of some of the students of political economy, is transitory. Be that as it may, we know that the situation is critical and that almost anything is liable to happen. I think in no other industry in all the country does the employer of labor so regard the rights of the employee as is true in the nursery business, and while this is true, it is becoming more and more difficult to command competent labor sufficient to our needs. I hope that we may during this convention find time for a full discussion of this question, for it is one of vital concern to every grower and paramount to every other problem at this particular time.

COMMITTEE ON POLICY

One of the things I determined before leaving Chicago a year ago was to attempt, through a very carefully selected Committee, to bring before this convention definite recommendations in Association policies. We should be able to say to our members and to the world, "here is what the American Association of Nurserymen stands for." We are many men of many minds, and very naturally and very properly there are some great big differences of opinion among us as it relates to questions generally. The question is often asked, what does the American Association stand for, and echo answers. Now, when this is written, the report of this special Committee has not been framed and I have no definite idea as to the scope of the report to be brought before you, but this much I want to say, that if this Committee can agree upon recommendations, their report should receive at your hands the most careful consideration. Believing that this will prove to be the most important matter to come before the convention, the afternoon of the first day will be given over to the consideration of this report, and I urge every member to be in his seat when this report is presented at 2.30 o'clock this afternoon. You have been annoyed by wholesale lists reaching your prospective customers in some mysterious manner. The Committee's report will make recommendations here that will be interesting to all of us.

MARKET DEVELOPMENT

For two years, under their own organization but closely affiliated with this Association, the Market Development Committee has been perfecting plans for the extension and development

of the marketing of our products. This Committee came into existence at a time when nursery products were selling below cost of production and, in the minds of some of us, their work is finished before begun, for, reason some of us, "why spend good money advertising a product already oversold." If the present reflected normal conditions, this might be sound reasoning, but the present reflects a rather abnormal condition. Rising to the popular and patriotic demand of the government, the nurserymen everywhere released their labor for war work and planted their lands previously employed in growing nursery stock to agricultural products. Instead of fields of trees, we have great fields of wheat, corn, cotton, and all the rest. The present, therefore, finds us with magnificent crops of other products but no nursery stock. As I have already suggested, this condition will not last. Already the nurserymen are planning to reestablish their growing departments, and within two or three years the surplus list will supercede the want list, and then the Market Development boys will become exceedingly popular. To be sure, this work so auspiciously begun should be continued. A full half day's program has been arranged for the report of this Committee, which, you will find, is thoroughly capable of speaking for itself. In considering the splendid work which this Committee can and will accomplish, I want to warn you that after all the Market Development will not prove a panacea for all our ills. When the most that this Committee can do has been done, it is only one cog in the wheel of our organization and most certainly should not be expected to perform the functions of the whole wheel. If, to illustrate, the normal demand is for 10,000,000 peach trees per annum and 20,000,000 trees are grown, we might spend every dollar of our assets in the promotion of Market Development with the result that 10,000,000 peach trees would go on the brush pile and the 10,000,000 sold would not bring the cost of production. Supply and demand will, therefore, govern prices. Is there a possibility that we can keep supply and demand within correct relations, I do not know. If you say no, you demolish at once and forever the beautiful theory of cooperative effort, without which there is no hope. I am not ready to say it cannot be done, and because I believe in your good sense, because I believe that within the heart and conscience of every man there is a strong spirit of cooperation and brotherhood, because I believe the future is bright with possibilities of good, I believe it can be done, not in a day or in a decade, but when we are ready to test to the limit the spirit of cooperative effort.

HOW CAN IT BE DONE?

(1) As nearly as possible, bring every grower of nursery stock in the United States under the influence of this Association, if not through direct membership, then through some plan of affiliation with state and district organizations which will at least influence the grower in policies that we, as a National Association, have adopted. It matters not how small the business of this grower, he is a link in the chain, and the chain is no stronger than its weakest link. Go after new members under the slogan, "We can and will help you make your business more profitable." This, in the truest sense, is market development, for the man doing a \$5,000.00 or \$10,000.00 business may be helped to do a \$10,000.00 or \$20,000.00 business, and in adding to the volume of business of the retailer we are, in the truest sense of the word, developing our markets.

(2) Determine as nearly as possible the annual normal need in all lines of our products, together with the supply, present and contemplated, and endeavor through educational campaign to keep supply well within demand. Here is the crux of the whole situation, and if it is possible to accomplish this, even in degree, we shall be greatly benefitted. It cannot be done in a day, in a year, or in many years, but it can be done, and it will be done. How to accomplish this is a matter of detail to be left to a competent organization under the direction of the Executive Committee, but I would have you remember that you are the Committee's "boss." If you desire this service, direct your Commit-

tee to go forward, and in the faith of your confidence and cooperation anything within the bounds of reason is possible. It all depends upon the character of your orders.

OUR FUTURE

Representing a great industry whose weal or woe is wrapped up in the prosperity or adversity of the agricultural ebb and flow of the United States, one has only to traverse this great country from east to west and from north to south to be convinced that the present crop of wheat and corn, oats and cotton, cattle and oil, and all the rest, is the greatest in the history of our country, therefore our future is bright with promise. With the harvest of our present crop we will be richer by billions of dollars than ever before. For the past several years we have, through necessities of war, been forced to invest our earnings in war activities, but with the return of peace, monies from these vast crops will be spent in reconstruction. The country from ocean to ocean and from lakes to gulf will, within the next few years, experience the greatest era of prosperity ever before known, (unless it acts the fool and goes republican in 1920). We will build more beautiful homes, and surround these homes with the choicest in fruits and flowers. In this prosperity you, gentlemen, are sharing and will continue to share, for you have a commodity as indispensable in home building as brick or lumber. We have had nothing in all the past to equal this, but even this prosperity may prove our undoing unless we build well the foundation of an organization equal to the emergency which is sure to overtake us.

I would not blot the picture I have drawn, but I would warn you to be careful, to prepare to-day to make the prosperity of the present permanent through effort of stabilizing the nursery business. If you will do this, and from the point of view of good sense, you should, I will liken you to the wise man who built his house on a rock, and "when the rain came and the winds blew and fell upon that house, it fell not, for it was founded upon a rock." That "rock," gentlemen, is organization, builded through cooperative effort.

EXHIBITS AT THE CONVENTION

The most notable exhibit at the Convention was a Bee-man tractor in the lobby of the hotel. A four horse-power engine that will take the place of a single horse in plowing, harrowing, lawn mowing, etc.

It created a good deal of interest, many wondering which would be the best investment, that or a good mule.

The J. Horace McFarland Co., Harrisburg, Pa., had their customary fine display of catalogues and color work.

Mrs. Nathan B. Greaves, Rochester, N. Y., had a fine lot of horticultural photographs.

A. T. De La Mare Co., 438 West 37th street, New York, exhibited printing and horticultural books.

The Elm City Nursery Co., New Haven, Conn., were the only exhibitors of living plants, with their novelties, Ibolium Privet and Box Barberry, and Cotoneaster acutifolia for which they were given a certificate of merit.

Thomas B. Meehan & Co., of Dresher, Pa., exhibited raffia, showing this material had once more got back into commerce.

J. E. Gilson Co., Port Washington, Wisconsin, made an interesting display of garden tools.

The nitrogen Co., Waterloo, Iowa, cultures of Nitrogen.

A. B. Morse Co., St. Joseph, Michigan, their usual display of catalogue work. The Feeny Mfg. Co., Munice, Ind., the Feeny Dust Gun.

Address by Mr. L. R. Latshaw

*Of the Butterick Publishing Company before the American Association
of Nurserymen on June 25, 1919*

Mr. President and Gentlemen:—

I come before you as an advertising man. An advertising man considers himself essentially a salesman. Advertising we consider the forerunner of sales. We believe that before the actual transfer of money is made in any financial transaction, that a sale is made mentally.

If I had the power of an orator I could build up any picture that I chose before you this morning. I could, we will say, create thirst. I could talk about burning sands and the thirst occasioned thereby, and then I could describe some delicious drink, until I had you fairly parched in your throats. I would sell you a drink, although I did not actually have a drink to pass out over the bar, or a hand ready to reach for the money to pay for it. I would be selling you the idea of a drink, and if I could sell it strong enough, you would get up and leave the meeting and go downstairs for that drink. Now, the bartender that sold you that drink over the counter considered that he was making the sale. He did not make the sale. I made the sale. He consummated the sale; I made it.

Now, that is what advertising properly does. It sells you the idea of doing something, and then you or your agents consummate that idea.

Originally, say twenty, oh, thirty or forty years ago, advertising was chiefly used by the faker. The Louisiana lottery was very heavily advertised. The maker of patent medicine, where the bottle cost three cents and its contents two cents and it sold for a dollar per and cured everything under the sun, that was the original user of advertising space, the faker. The faker has always been the pioneer, and he has always been thrown out.

Originally we started out by advertising to sell fakes. The second thing that we sold, and the idea was generally accepted, was the selling of a specific, definite, tangible commodity, Ivory Soap, or Gold Dust, or talking machines, or a specific piece of merchandise, and now we are beginning to enter the third era, the sale of ideas. All labor unions present their side of the case, and the employer presents his, and one or the other sells the idea to the public and the case is closed, the idea is sold.

One of the chief and most important things about advertising, if your Association undertakes it, is its recognition of well-established standards. The canners of vegetables in this country are putting through now an inspection system of their own for self-protection. They expect to put out their own inspectors, as the Department of Agriculture does in the packing of meat, so that when any of you gentlemen buy a can of canned corn or peas, or beans, or what not, and it has the inspection mark or stencil of the Canners' Association, you may have the same assurance of the sanitary conditions under which that packing was done that you have when you buy United States inspected meats.

Now, when that Canners' Association starts that, they have taken one great step, when they take the next step, it perhaps will be to spend a million dollars and will advertise that stamp, advertise that brand; every year that they advertise they will add to the bond that they give to the public as security for the performance of what they promise, and as that bond increases, the penalty for not carrying out their obligations to themselves as expressed to the public so greatly increases that you have the finest security in the world for their carrying out exactly what they say, because they cannot afford to do otherwise.

A very successful man in business here in Chicago told me that if honesty had never been discovered until recently, the

smartest crook would have discovered it as being the best business policy.

Now, I suppose every one of you employ salesmen and those salesmen—assume that they make that transaction, assume that they sell the goods. The thing I am trying to bear down on today is that the enormous rewards come to those manufacturers or that association who is successful in selling ideas to the whole country.

I spoke yesterday about the Sunkist orange. The Sunkist orange is sold at auction in the fruit markets, and, as a general rule, a box of the brand of Sunkist oranges will sell for 25 cents above the market. Now, why? Why is it that the Sunkist Association does not allow their own members to pack their own fruit? They discovered that Nature had made the most beautiful package in making an orange or a lemon; that if it was not interfered with or injured it could be carried for a long time, but if it were cracked, the blue mold spores would get into it in a very short time, and consequently the fruit would be ruined. They discovered that they could not afford careless packing, because if it was carelessly packed, if an orange or lemon were dropped and the fruit was injured, that beautiful package was cracked that Nature had put there and the fruit would spoil. Consequently the association does not permit the individual member to do his own picking and packing and grading; they do it for him. The association has got too much at stake to let any one slip anything over on them. That is the thing the public is beginning to realize, and if you gentlemen assume, if you in the association have any conception of the value of such a course, you will grasp the idea.

I spoke yesterday about the paint and varnish association combining to sell the idea of using paint. The Brazilian Coffee growers and the American coffee importers have combined to sell the idea of coffee. I ventured the personal opinion yesterday that it was badly done, as contrasted with what one man, now deceased, Mr. Post, of Battle Creek did. He started out to sell you an idea; he started out to sell you the idea that coffee was harmful, and he sold that idea, and he sold because of that idea a villainous concoction of burnt cereals that made him millions. It was simply the selling of an idea and not the selling of the commodity.

The sale of the commodity follows the sale of the idea. I fortunately do not have to ride in a Ford, but the Ford has sold to the public the idea of having gasoline and oil stations all over the country, and I have more ease riding around in a touring car, because I know I can get the oil and gasoline when I want it conveniently, because the idea has been sold to the people.

Now, you have got to sell to the public the idea of proper planting of trees, shrubs and plants and the growing of them. It is a natural instinct with folks, but you have got everything in the world to play on if you choose to. You have the matter of cupidity. Every second hand car dealer in any city paints and varnishes and be-furbishes the cars that he takes in and handles and sells them again, and he would not think of selling a car without paint; and a clever real estate man will paint up a house before he attempts to sell it. The cleverest real estate folks, first thing they do in building additions to any town is to put trees and shrubs out there. It is the best money proposition they can put in and they know it. A man told me the other day that he had sold three houses in a suburb of a large city in rapid succession. He said, "I have great success with trees, and I set out

trees and shrubs and the place looks so fine, people come out and they offer me a price that I cannot resist."

You have cupidity. You have the old hard-headed real estate boy that does not care for beauty, does not care for anything but business. All right. Beautify your place in order to sell it.

You have got the people that want to make homes. You have got an opportunity there. You have got an opportunity with women's clubs. Whenever we want a thing done we go to the women's clubs. The house that I represent ran a campaign to save the seventh baby. Medical authorities tell us that every seventh baby that dies in the United States unnecessarily dies, dies from causes that could have been prevented. We got the

Now what can they do better than to see that the highways of the future are lined with wonderful maples and great elms? Look for the opportunities for forestry in our country that they have abroad.

You have the opportunities for flower boxes; you have the opportunities for beautifying lawns. And, as I tried to point out yesterday, Gentlemen, if you want to spruce up a block, pick out any one residence in the surrounding properties and spruce that up, and I will guarantee that the influence will make itself felt on the entire block. And when that block cleans itself up and spruces itself up, it will make itself felt in that entire section of the town, and after that section of the town has built itself up,



The American Association of Nurserymen in Session at Chicago. This picture was taken just after

United States health officer from Jacksonville to help us. Whenever we get up against it in a local campaign we go to the women. We got the women after the county council, whether they have got the vote or not, and we get the legislation that we want.

You reach the women of this country in the development of parks. We have inquiries in regard to community development. They are constantly increasing. War work, with the centering of attention in Red Cross and various other things of that kind means that throughout the Middle West they are asking us for plans for community houses, and "What can we do for our town?"

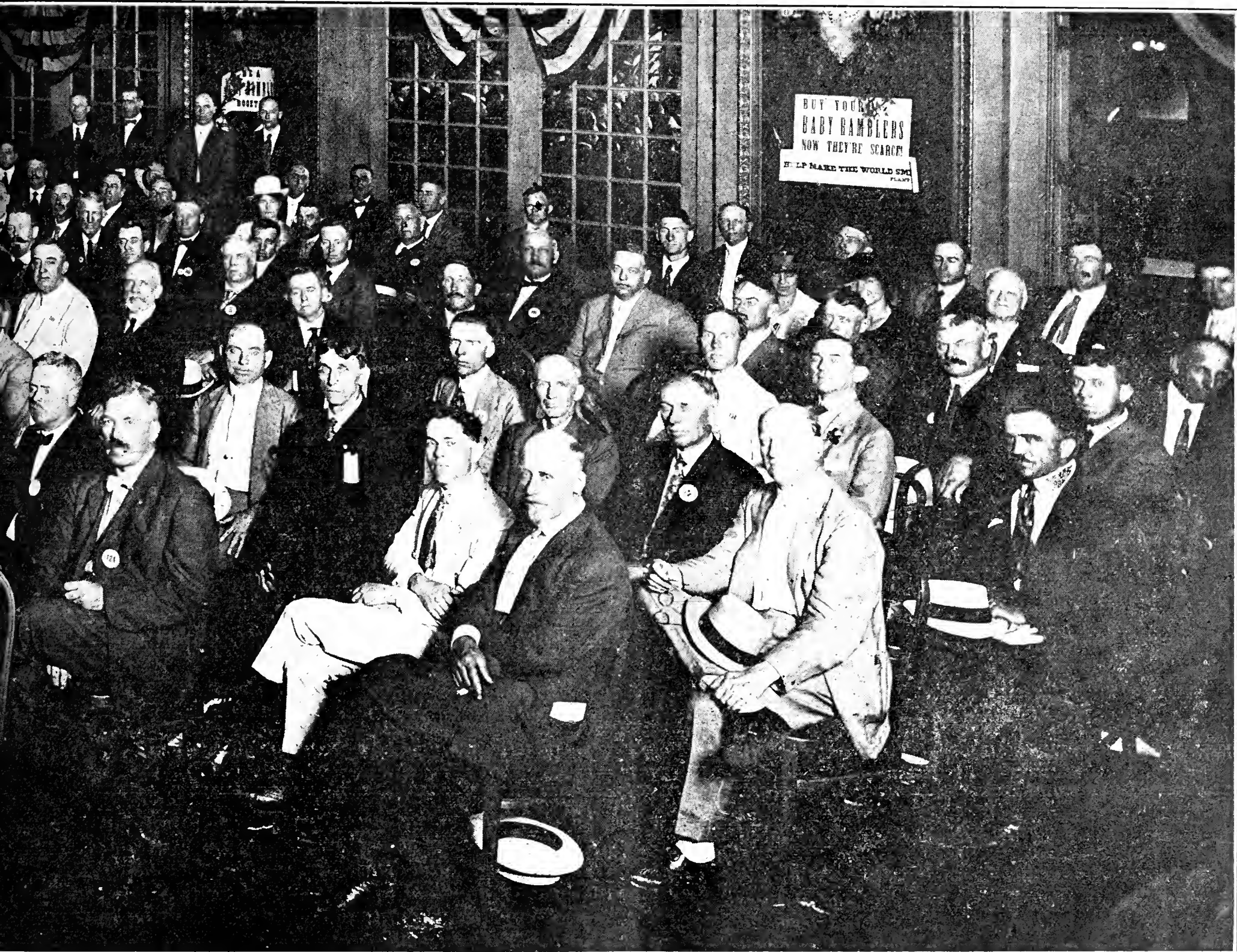
you may be certain that sooner or later the whole town will be planted and beautified, and then, gentlemen, if that town is a beautiful town, it is proud of its trees, proud of its park, of its beautiful homes, just as sure as shooting the other towns in the immediate surrounding territory will follow their lead. You know that to be true in your own experience with other things.

Now, you have the opportunity to sell to the women of the United States, and women are the ones that will get action on this thing. The women are the ones that have got action on making us dry after the first of July. The greatest and most

skillful campaign by a vigorous minority that has ever been known in political history and it has been put over by skillful appeal to the women, as a general thing. You have the opportunity, you have the audience, and you will get your reward individually by supplying the material to meet the idea which you will have sold as an association, and it is only as an association that you can sell that idea.

And I furthermore stated yesterday, I spoke of a number of associations that have been successful, I spoke of the Sunkist people with the citrus fruits, then there are prunes, raisins, Southern pine, cypress, birch, hemlock. The Weyhauser interests are starting in now, they raise long leaf yellow pine,—cran-

using granite. Lumbermen are successfully selling their idea; the association of paint and varnish manufacturers are selling their ideas. The people that make magnesia (?) for heat installation are successfully selling the idea of using magnesia for heat installation. The manufacturers of creosote block pavements have successfully sold their idea, and their idea is a very good one, gentlemen. I just pause for a moment, because it is rather clever. If the city of Detroit is known to be going to pave the streets there, the association of wood block pavers put in advertising in the papers to sell the idea to the people in the city council of Detroit that they ought to pave this street with wood blocks, and every man that bids for a street paving contract in-



Carlatt, Chairman of the Federal Horticultural Board, Washington, D. C., had made his address.

berries, cotton, limestone. You know down in Indiana they used to throw out on the dump a gnarled limestone. Their advertising man in Chicago got hold of that, and he offered that curled gray limestone which had been thrown on the dump at an extra price, a higher price than the regular limestone, and there were a great many builders that saw the advantage in using this beautiful curled grain and they are paying them for what formerly went on the dump a higher price than the main or chief commodity.

The granite manufacturers are successfully selling the idea of

cludes in his bid one cent a square yard for advertising. The association pays for the advertising. Everyone that bids on the thing bids on one cent a square yard and whoever is the lucky bidder pays the price for the advertising.

Now, that is not feasible in your case. I said yesterday that I knew of no association that had started out with national advertising and marketing ideas that had not been successful. Do you know of any? Not one association that started out that is not at it now and is at it successfully. I said yesterday that I had handled about seventy-five million dollars worth of advertising in

fifteen years, and that I very strongly urged you not to consider an advertising campaign unless you were prepared to stay by it for three years. I reiterate that. I do not think it advisable for you to touch it, you ought not to spend a cent unless the appropriation that you vote, if you vote an appropriation, is one that you are prepared to vote for so much a year for three years—you can add to it if you see fit, but you ought not to start unless you are prepared to carry it through for three years.

I said yesterday, went into it at great length, which I will not go into so much now, I said that of the twenty-three million families in the United States there were a certain seven million who had per family \$900 or more a year as a family income, and that to those people your message as an association, and to those people as individuals your message was to be addressed, because that \$900 per year per family represented the line below which the family's first problem is existence, and above which the family's first problem is living, and if you go only to those families whose problem is living, you go to the people who have the means and desire to improve the conditions of living. Therefore your message should be addressed collectively and individually to those seven million families and that through the national advertising you could easily reach anywhere from one to three families out of the seven, and they not only are those commercially most worth while, but influentially they are most worth while, because it is among that particular seven million families that you will find all the sectional leaders in political, financial and religious lines.

I spoke yesterday about the small cost of doing national advertising. I use for example my own house that has a circulation of a million and a half for the magazine; I refer to the ones going to women. If I were to give you the mailing list and you were to buy post cards and mail one post card one time for each name that it would reach it would cost you \$30,000 for the post cards, without addressing or printing. I said that you could make a campaign for \$100,000 that would be larger than the average national advertising campaign, and yet I pointed out that that \$100,000 that you would expend, let us see, how much did it amount to—half a cent a family, \$250,000 per month, or half a cent a family per year. Half a cent a family per year, five to the family, that would be one mill per human being per year. That will give you a fund of \$100,000 to spend, and that is about the average, and advertising national campaign is about \$60,000, so that you would be considerably above the average, and yet you would spend one-half cent per family per year. It would cost you to send one postal card to each family \$460,000 a year to send one postal card to every family in the United States once, it would cost you \$460,000.

Now, gentlemen, there is just one thing more, and I touch on that lightly, because I do not want to be misunderstood, but one of the great advantages of selling clothing, and one of the great advantages of selling paints and varnishes and one of the great advantages of selling automobiles is that the purchaser of your commodity is a walking advertisement for the goods. For the idea. The fact that the automobile drives up in front of the house and proclaims itself with its honking horn to the entire

neighborhood makes its owner anything but dissatisfied, and it makes the owner's wife anything but doubly dissatisfied.

If you can go into any community and beautify that community and assuming that you are intelligent enough in the conduct of your own affairs to make that profitable, but by the same token you are making it profitable to the man who uses your goods, you are making it profitable to the man who sells the lot after you have beautified it; you will make it profitable for the entire community; but, above everything else, gentlemen, on the top of profits you will have contributed in a very large measure to really making life worth while, because it has been pointed out—have you ever thought of the enormous increase in labor saving machinery in the last 100 years? The perfectly amazing increase, the coming of steam, all these things, the electric power, all these labor saving devices, and yet as far as we can ascertain today, after 100 years of magnificent development of labor saving machinery we work harder than they did 100 years ago. Why? Because the standard of living has been raised.

Advertising men were called by one man in a speech heralds of discontent. Let us see. You made us discontented with the old horse and chaise and sold us a one-cylinder automobile, and no sooner were we proudly puffing with one cylinder, than you made us discontented with that and sold us a two-cylinder, and we were no sooner proud owners of a two-cylinder car, than you heralds of discontent made us want a 4-cylinder car; and we no sooner had a 4-cylinder car, when you made us want a 6-cylinder, and then an 8-cylinder and now a ten or twelve-cylinder car. And what will you lead us into next? Now, whether or not it is advisable to have a public bound to this higher standard of living I am not prepared to debate, but, gentlemen, advertising men are heralds of discontent. We plant in people's minds the idea that a sun-baked gravel playground around a school house is an eyesore and a shame and we make them long for shaded, beautiful playgrounds. We make them discontented with what they have, and having made them discontented, having planted the idea of beauty in their minds, and primarily the desire for beauty, we make it possible for you gentlemen and the agents representing you, to effect sales without any trouble, although we have never appeared in the matter.

There lies before you then the opportunity to sell the entire United States of America an idea of planting, planting on the highways, planting in the parks, planting in their own homes, making this country beautiful, and I pointed out yesterday that you will have two million folks, two million young men back from France that are going to preach the idea of beautification architecturally and in a landscape way. You never had an opportunity in your lives to bring that home before, with two million unrequited salesmen who will say to the people in the community in which they live, when they read the brief which you set before them, "That is so," and begin to take pride and talk about what they saw in France, and compare the conditions in France with what they find here, and to elevate the standard of living as it represents the real, genuine beauty of the surroundings and making life worth while. There is an opportunity, gentlemen, for both money and sentiment. I thank you.

The Nurserymen's Opportunity in the Reconstruction Period

Address of Albert F. Woods, Pres. Maryland State College, Before the National Nurserymen's Association, Chicago, June 25, 1919

I deeply appreciate the honor of being invited to attend and address this great national body of men. I am more than fully repaid for the trip by having the opportunity to meet and rub shoulders with the great plant and tree propagators of this country. You are the men that start things. You supply the plants

or young trees that, with proper treatment, give forth the fruits of the land. It is you who provide the plants and shrubs for our artificial decorations. How barren many sections of this country would be if it were not for our nurserymen! Yours is a business that is both commercial and aesthetic; yours is a business that

appeals to the best that is in man. I consider the nurserymen of this country among our greatest benefactors. The nurserymen's business is full of hope and hope is one of our greatest attributes. You deal almost entirely with the young in plant and tree life and whenever we deal with youth in plant or animal life we cannot but gain inspiration to look forward to the future.

I have been requested to discuss the nurserymen's opportunity in the reconstruction period. * * * I believe there was never a time in the history of this country when the nurserymen and farmers had a greater opportunity to render service and to enjoy the fruits of their labor. We gain from the world in direct proportion to what we give. We cannot live unto ourselves.

Sometimes some of us get an exaggerated idea of our rights and our neighbor's obligation, but if we turn this around and get an exaggerated idea of our obligation and our neighbor's rights we will find no difficulty in cooperating. We speak of the reconstruction period; it really is not a reconstruction period for this country, it is a readjustment period. Even when we speak of the period of readjustment, we mean that now is the time for learning to do a number of new things and for doing many of the old ones much better than before. We do not mean reconstruction in a sense that we are first to wreck everything and then proceed to rebuild the world out of the salvage.

I take it that the largest opportunity at this time for each of us is to pour oil rather than sand upon the bearings upon which the world is turning. You know there are some who would rather put in sand than oil, just to hear the noise, even though it means an inevitable stopping of the machinery. This is a period in which to encourage not class distinction, but class cooperation. Each industry must learn its dependence upon the other. Everything is done by organized effort; but, organizations of farmers, of labor, of capital, of consumers who only organize to protect their interests, who combine only for the purpose of getting their rights—they all will miss their greatest opportunity, which is to help evolve better ways of doing things.

COST OF PRODUCTION

This brings me to a concrete suggestion that I want to make to the nurserymen of the country. How many of you here present know or believe you know what it costs to produce your nursery stock? The lack of information on the cost of producing farm and nursery products is one of the large problems that the war has emphasized in this country. I fear if some of you nurserymen knew the actual costs of conducting your business at present, you would make a number of changes in your practice or routine next year. The farmer, the nurseryman, the dairyman and every other agricultural producer should know the cost of production. This is another great opportunity for nurserymen and farmers to use their own best efforts and to see to it that the National Government, through the Department of Agriculture, and the States through the State Colleges, are so equipped financially as to aid you in securing accurate costs of production.

The lack of this definite information has been the cause of much friction between various interests and consumers and unfortunately has often resulted in injustice to the producer. The cost of producing nursery stock has greatly increased during the past few years. Do you know how much? If not, how can you place a proper price upon your produce? I hope that some such steps can be taken to ascertain costs in the nursery business as are now being taken by the Government and States in other industries.

REDUCTION OF VARIETIES

I have often wondered in looking over catalogs, if it were really necessary for nurserymen to grow such a large number of varieties of the same fruit or plant. I believe the sooner we can come to standard varieties for different sections of the country, the better for the grower and the better for the nurserymen. There is little to be gained, it seems to me, by a nurseryman carrying such an enormous list of varieties of Peach and Apple. Efficiency and standardization of the new age should cause you

gentlemen to give the subject of a reduction in commercial varieties careful consideration. I am certain that many orchardists could adopt the practice of raising fewer varieties to advantage. A variety registration system would be helpful. It might be organized through the National Department of Agriculture.

STANDARDIZATION OF GRADES

We should make a united effort to secure Federal legislation establishing proper grades of fruit. Nothing will improve the marketing of agricultural products generally and fruits in particular, so much as uniform grades and packages.

There are many State laws in existence—some good and some indifferent—but State laws are not what we want for handling the Apple and Peach industry. Especially does this apply to Apples. Uniform grades will establish confidence in the market for the product. There is a vast difference between grades and sizes. We can have any number of sizes, but the grades should be uniform.

CONTROL OF INSECT PESTS AND DISEASES

I approach a brief reference to these pests with a great deal of trepidation. I have known some nurserymen who seem to believe that insect pests and diseases were created as special tormentors of their business, and that State entomologists and other State and national officials take special delight in harassing the nurserymen. On the other hand, I believe the nurserymen as a whole throughout the country have responded generously to the demands of modern times for the control of such pests and diseases as have threatened the industry from time to time. I am quite certain that no industry has suffered a greater proportionate loss from insects and diseases than the nursery industry. The responsible nurseryman who sticks to the fundamental policy that a purchaser of a tree or plant is entitled to receive a clean, healthy, good-rooted specimen, has had to contend with many difficulties and losses.

There are many problems in the control of insect pests and diseases in the nursery that have not been solved. In fact, it seems to me we have made more progress in the control of field or orchard pests than in those peculiar to the nursery. I believe this national organization can be a very effective force in the future, for the encouragement of investigational work which may solve some of these problems.

QUARANTINE 37

I mention this subject with a still greater degree of hesitancy. I have observed the various discussions of the justice and injustice of the regulations that have appeared in the press from time to time since the announcement by the Federal Horticultural Board. I am not prepared to discuss the details pro and con, but I am confident that every nurseryman in this country believes in the general policy of preventing as far as possible the introduction of injurious pests. We have enough with us at present. We should employ every method consistent with justice to the respective interests to prevent further introduction of foreign pests. While there may be many stocks or seedlings and plants that we are not now growing successfully in this country, I am among those who believe that we can produce somewhere, somehow, in this vast land of ours, the equal of plants raised in any other country.

The provision permitting special stocks to be imported through the Federal Horticultural Board should provide for the entrance of necessary stocks and novelties from abroad. I know the Federal Horticultural Board has given very careful study to this problem and while there may be exceptions that seem to be unjustified, yet, the doubt, it seems to me, should be in favor of this country. I believe in taking an optimistic attitude when there is a doubt and I firmly believe that in a few years we will consider how near-sighted we were at this time to oppose a policy that is in the interest of our business and the country as a whole. I

believe this regulation offers the nurserymen many opportunities to serve the nation.

EDUCATION

One of the great lessons we learned from this war is the value of efficiency in our every day work. Education is the greatest handmaiden to efficiency. Here lies the greatest opportunity for any body of forward looking men. In your business, the per cent of education runs higher than in the general course of men because you are specialists. For this reason, the promotion of education among our people becomes a greater duty for you.

We must improve our rural schools. Let us improve our secondary schools; let us advance vocational education. We must advance agricultural education. Never in the history of the country has the importance of agricultural education been so emphasized as now. We are fast approaching the time, if it is not already here, when agriculture will be taught in every school, in every grade from the humble one-room school house in the distant rural community to our highest universities in our greatest centers of population, on a broader and bigger scale than ever before.

We must see to it that our land grant colleges are adequately provided for in order that they may render the necessary service to the public during the new era that is before us. Not many years ago a college graduate in agriculture was looked upon as somewhat of a luxury by the great mass of farmers. If he made good upon a farm it was because his father backed him or because he had unusual luck; if he failed, it was because he was educated away from the farm and spent his time trying out the theories of some professor.

Now this attitude is all changed. The college graduate in agriculture is in the greatest demand. Farmers are depending upon these men as county agents in our extension work, to lead them right in this crucial period when a blunder, due to ignorance, means so much. Agricultural education means today, my friends, in many phases of agriculture, the difference between success and failure.

The American Association of Nurserymen can wield a wonderful power for advancing education in general and agricultural education in particular among our people.

PROBLEMS OF LAND AND LABOR

You should take a leading part, gentlemen, in assisting the Government to decide upon a policy for the rehabilitation of the returned soldier upon land. You should see to it that such a policy is adopted as will first aid the soldier to begin life anew. We cannot do too much for him. He is not, however, a subject of charity. He is a hero who desires an opportunity to live and prosper among his fellow countrymen.

While we should develop our land resources as worldwide conditions demand, yet, we must see to it that all available unused land is brought under cultivation and properly manned before large new areas are reclaimed. I should be glad to have your body consider Maryland's policy in regard to this important matter.

We must improve labor conditions in the country. This is a large subject which I cannot discuss at this time. It is a problem, however, in which one and all can render a great service to agriculture.

As citizens and representatives of a large and important industry, you should study the great transportation problems of this country. This includes not only the future policy to guide the conduct of our railroads, but also means by which we can profitably use the great merchant marine that has been built by American genius and industry.

These and other problems of national import demand our attention.

Finally, let us put on the armor of righteousness and justice to all men and face the future with determination and faith; upholding the high ideals of American democracy and embracing every opportunity to render service to our fellowmen, to the

great industry which we represent, and to the perpetuation of those ideals for which this great nation was established and for the defense of which our gallant heroes braved the dangers of the U-boat, machine gun, shrapnel, gas and liquid fire.

THE BABY RAMBLERS AT THE CONVENTION

The Baby Ramblers were much in evidence at the convention and proved the truth of the old saw "A chip of the old block;" when serious business was on hand they were right on the job, carrying messages, handing out programs, hunting up different members and looking after things in general.

On Wednesday at 10 a. m. after being properly washed, dressed and fed they held their annual meeting with all the seriousness and dignity of the grown-ups.

After talking over plans for the coming year one fat little cherub gravely suggested that as the officers had conducted themselves in such a way as not to be caught in doing anything forbidden by their nurses it would not be wise to take a chance on new ones.

This was unanimously agreed to.

The subject that received the most serious consideration by the meeting was Can Baby flourish under the new order of things? A scarcity of milk, uncensored moving pictures, the toughness of chickens, were mentioned as some of the things that retarded growth and prevented healthy bloom.

As nursie did not seem disposed to take action that would change things no decision was arrived at, instead they all contributed the nickles and dimes they had been saving for a year to have a real good time.

With the connivance of wet nurse, Mrs. Ben Davis, Baldwin, Mich., they stole away from the convention the same evening. As no reporter accompanied them and all were sworn to secrecy little is known of the glorious time they had but there was evidence of it the day after in whispers of Kelly's Band, the Green Mill, Springy Chickens and the tired happy faces.

HEARD AT THE CONVENTION

Rice Bros., Geneva, New York, took orders amounting to \$10,000 while at the convention.

An orchard syndicate is acquiring title to orchards in Pennsylvania, West Virginia, and other states, paying as high as \$750 to \$800 per acre for bearing orchards. This is doing much towards stabilizing values.

The shortage of homes in the United States will do much to stabilize values in ornamental nursery stock when building operations once begin.

A sale of 60,000 peach trees $\frac{1}{16}$ ths at 22 cents was made at the convention; 25 cents was mentioned for apples, and 30 to 35 cents for cherry and plum.

The book "Fruits for the Home Grounds" prepared for the American Association of Nurserymen by U. P. Hedrick, Horticulturist, New York Agricultural Experiment Station and from the J. Horace McFarland Press, Harrisburg, Pa., received much favorable comment from the different nurserymen at the convention.

It seemed to fill the bill in every respect.

It is primarily intended for nurserymen to secure in quantity, have their name printed on the cover and dis-

tribute to their customers, prospects or where it will do the most good.

It impressed Senator Orlando Harrison, Berlin, Maryland, so favorably as an educational work he is going to use every effort to have it introduced into the public schools of his home state as part of the curriculum.

SPEAKING OF SLOGANS

Speaking of slogans is it possible to conceive a better one than "F. O. B. Kitchen Door" to encourage more vegetable and fruit growing in the home gardens.

It is really a form of insanity the way so many people of this country are living out of tin cans and paying five times more for vegetables and fruits in cans than for fresh ones F. O. B. Kitchen Door at the cost of a little effort.

Those nurserymen who grow ornamentals are aiming to make it cost more to feed the eye than it does to feed the stomach.

CHICAGO CHOSEN FOR THE NEXT CONVENTION

A strong appeal was made through the publicity bureau of St. Louis to have the nurserymen hold the next Convention at that city. The suggestion was favored by many of those present, the voting being 25 for St. Louis and 53 for Chicago, Chicago of course being declared the place of the next meeting.

The following officers were elected to serve for the ensuing year:

J. Edward Moon, Morrisville, Pa., President.

Lloyd Stark, Louisiana, Mo., Vice President.

J. W. Hill, Des Moines, Iowa, Treasurer.

Mr. J. B. Pilkington, Portland, Oregon, and E. S. Welsh, Shenandoah, Ohio, were again elected to serve on the Executive Committee.

It was a tactful appreciation of the National Association to elect Lloyd Stark Vice President. Most nurserymen will recall that he was elected President just prior to the war. Upon the outbreak of hostilities he gave up everything to serve his country, and J. R. Mayhew, of Waxahachie, Texas, Vice President at that time, acted in his absence.

MARKET DEVELOPMENT TAKEN OVER BY THE NATIONAL ASSOCIATION

Those who have supported the movement for Market Development since its first inception to the present must feel highly gratified at its growth and progress.

Results at the convention proved to be even better than the most sanguine dared to hope.

The earnest work of John Watson, E. S. Welsh, Robert Pyle, C. R. Burr and O. Joe Howard cooperating with F. F. Rockwell, manager of the Nurseryman's Service Bureau, brought the work of the subscribers organizers to that stage where it began to make itself felt in creating a market for nurserymen's products, but what was more important it opened up the vision of future possibilities to all members of the National Association, with the result that the convention adopted the Subscribers'

Organization for Market Development as an activity of the National Association assuming its obligations and responsibilities.

Every opportunity was given the members of the Association to vote on such an important measure but sentiment seemed to give almost unanimous endorsement and readily voted an assessment of one quarter of one per cent of the annual turnover of each member's business with a maximum assessment of \$1000.00 in addition to the \$10.00 annual membership fee. This ruling to go into effect June, 1920.

Mr. Rockwell gave an account of what had already been done and showed the wonderful possibilities for the future.

With the small amount of funds already spent syndicated articles have been published in over 700 newspapers covering territory of the subscribers and a plan and budget worked out for the expenditure of \$60,000 which will include:

Syndicated articles published in at least 1000 newspapers.

\$10,000 offered in prizes through the Delineator Magazine to encourage planting.

Illustrated Lectures.

Moving Pictures.

Demonstration Plantings.

Association advertising, etc.

There is not a nurseryman that will not benefit by this advertising. It is a national campaign. Until next year the campaign will have to be carried on by the funds already subscribed as the assessments against the members of the Association will not be effective until next year.

There should be no halt in the campaign, as only about one-third of the members of the National Association were subscribers to the Organization for Market Development, every effort would be made to get the remaining two-thirds of the membership to support the movement by voluntary subscription until the assessments become due.

The opinion of the majority was very evident there should be no halt in the campaign which will do so much towards developing a market for nursery products at good prices.

It was pointed out that the present demand and good prices would only prove a "fool's paradise," unless strenuous measures were taken to create a lasting demand for increased production that will be sure to follow present conditions.

ONE HUNDRED DOLLARS REWARD

Those in charge of the Market Development have offered a prize of one hundred dollars for the best slogan to be used in connection with the National Advertising of nursery products.

The prize winning slogan will be adopted by the National Association.

Send your suggestions promptly to

F. F. Rockwell, Manager,
Nurserymen's National Service Bureau,
220 West 42nd Street,
New York City.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in Nursery Stocks of all kinds. It circulates throughout the United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements should reach this office by the 20th of the month previous to the date of issue.

Payment in advance required for foreign advertisements. Drafts on New York or postal orders, instead of checks, are requested by the Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nurserymen and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be addressed, Editor, Flourtown, Pa., and should be mailed to arrive not later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., July 1919

Subscribers to "Nurserymen's Fund for Market Development"

THE CONVENTION The most lasting impression received at the Convention was that of confidence in the future. The optimism was very conspicuous. Even in the discussions little dissatisfaction was expressed with the business last season, and all seemed to be looking forward for continued good business at good prices.

It was a business meeting in every sense of the word and gave one the impression of a body of men meeting together for business only. There was an evidence of earnest determination to do things.

In the early days of the Convention a feeling of uncertainty was evidenced and no one seemed to know just what was going to happen. Everyone seemed to be looking for a lead, and anxiously watching the trend of events. In the earlier meetings the reactionary element was in evidence, but this gradually gave way to the new spirit of progress that resulted in the various actions decided upon by the association.

One could almost mark the evolution of the Market Development Movement from a few, to the almost unanimous convention. Active antagonism induced particular selfish interests were in the earlier meetings, gradually gave way to a spirit of cooperation for the good of the entire absence of lobbying or selfishness in its place an evident desire to do equal chance for all.

ep of the
upported
the Con-
fear that
er in the
der spirit
re was an
ethods, in
t with an

TRADE PRICES The resolution printed on another page in relation to "Trade prices to the trade only," adopted by the National Association is to be highly commended in that it shows a desire to stop the suicidal practice of selling to the consumer at the same price as to the trade.

The practice is poor business. It demoralizes prices and is manifestly unfair, undermining the very principles the National Association is trying to establish to lift the business on to a higher plane.

It is very doubtful, however, if the resolution and penalty will be effective in accomplishing its purpose.

Prices and grades as yet are not sufficiently standardized. Some nurserymen's trade prices are as high as others' retail. Others again do not grow or offer stock to the trade, merely catering to the large consumer, and brother nurserymen merely buy from them because it is the most convenient source known.

Perhaps the leading landscape architects are not connected with any particular nursery, but there are a great many who have a small nursery and a large landscape practice, making it possible for them to buy as nurserymen for their clients.

Then there is the man outside the Association, a legitimate nurseryman, but not bound by any resolutions or penalties, and so in a position to play havoc with the business of the man who is under restrictions.

The resolution was doubtlessly inspired by failure in competitive bidding, but there are too many ways to defeat its purpose and to enforce it occasionally would only be an injustice.

THE NURSERY FRAUD ACT IN ARKANSAS

On another page we publish a circular letter distributed by the Arkansas State Plant Board which gives a very good idea of what is required

of nurserymen to do business in that state.

We can hardly believe our brothers in the State of Arkansas are so undependable as to require such stringent regulations or that there is a bigger percentage of crooks in Arkansas than any other State. Was it not possible to protect the public against the occasional unscrupulous nurseryman by the criminal laws that are equally applicable to any other business?

Why should the nursery business be singled out and put in the rum class, requiring bonds and licenses to do business?

The wealth of the country in so far as it has been increased by the production of fruits, to say nothing of the enhanced value due to the propagation and distribution of shade and ornamental trees, plants and flowers, is mainly due to the nurserymen and horticulturists and, incidentally it was done before there were laws to prevent.

They have not appropriated the natural wealth of the country, stripped the forests, dried up the water courses, ravished the earth of its minerals, but as a body have labored patiently for little pay, to increase and produce those things necessary to the welfare and happiness of mankind.

Legislation may be necessary to control the careless, ignorant and unscrupulous nurseryman and dealer, but the present laws, rules and regulations savor too much of

the theory that nurserymen are undesirable citizens and their business should be held very much in restraint.

It is difficult to understand why there is so much stringent legislation; perhaps the answer is, because the government recognizes the vital importance of the business to the welfare of the country, and the officials who are elected or appointed to look after those interests fail to measure up to their job and assuming to themselves all the horticultural knowledge, accomplish little but repressive legislation.

Considering the strong feeling that has been displayed among nurserymen since Quarantine 37 became law, it speaks well for the common sense and tact of the officers of the Association for inviting Dr. Marlatt to address the convention, giving him an opportunity to explain the government's position on quarantines, and at the same time avoiding discussion of a matter that had already become law.

IS UNCLE SAM GOING INTO THE NURSERY BUSINESS TO THE EXCLUSION OF ALL OTHERS?

A few years ago very few in the allied countries could be persuaded to believe that Germany was preparing to wage a world war for aggrandisement. Statesmen, travelers, generals, and writers constantly warned the world that such was the case, but the average man on the street pooh-poohed the idea, and put it down as one of the improbabilities or impossibilities. The mind could not be brought to conceive such a horror as the world has just passed through.

We merely call attention to this to give weight to the statements which follow. While, of course, the parallel is perhaps ridiculous in one way, it is very deadly. Those who are now so much in favor of quarantining and giving over the government of the horticultural world to the entomologist, will perhaps in the very near future wonder why they did not have greater foresight.

If we consider all the regulations, quarantines and law pertaining to the transportation and handling of nursery stock, it can be very readily seen which way the wind blows, and the trend of thought and action.

Nurserymen or florists, or in fact, anyone else who now favors such legislation as quarantine No. 37, should remember this is only a step that is leading somewhere else, and is by no means a final one. Thought and action along this line is progressive and will naturally lead to quarantines against interstate commerce, except under perhaps the most stringent regulations, and ultimately, government ownership, through the Agricultural Department, for that is practically what it would amount to, of all the commercial, horticultural enterprises in the United States.

A few of the recent measures are merely straws which point in this direction, such as the bill HR 3157, by Congressman Hougou, giving to the Secretary of Agriculture, the right in his sole discretion to regulate the transportation in or through, or the growing or cultivation of horticultural products in the District of Columbia.

The bill by Congressman Esch, of Michigan, HR 1227,

to establish an agricultural plant and experimental station at or near Mauston, Wis. The bill presented by Congressman Raker, of California, HR 1127, to provide for inspection of any parcel sent by mail, which contains fruit, plants, trees, shrubs, nursery stock, grass, scions, peach, plum, almond, or the pits of other fruits, cotton seed, or vegetables at the point of delivery in any post-office of the U. S. that requests such inspection and where the requisite inspectors are provided by the states to perform such services, referred to the Committee on Agriculture. This bill is similar to a bill filed by the same congressman in the 65th Congress.

The bill by Congressman Cramton, HR 329, to prevent the shipment and sale in interstate commerce of nursery stock not true to name.

These bills show a tendency and are doubtless only a beginning, to a very complete and stringent government control, which will be able ultimately to place a fence around a nursery or horticultural establishment in any state, and to put it out of existence. It is time the nurserymen and horticulturists woke up to the accumulating evidence that this will be the ultimate result of the present trend of action, unless there is something done to counteract it.

It may be suggested by some that it will be a good thing when all horticultural enterprise is controlled by the government through its experts.

Those who hold this opinion should not forget that governments are largely for the purpose of saying "don't" or "verboden" and that we owe little or nothing of the progress made in growing and improving the fruits and products of the earth to government enterprise or entomological knowledge. The fruits and flowers that add so much to our happiness and welfare are the result of individual and commercial enterprise and effort.

The function of business and commerce is to produce and distribute. The function of government is to see that it is done fairly and to look after the welfare of the people as a whole, and it is evidently working on the assumption that the college men, entomologists and those with political power or in the government employ are the best fitted to govern the rest of the horticultural world.

This assumption may be correct and it is also true that the type of horticulturists who are now governing things are as rarely successful as producers as a practical horticulturist is in the laboratory.

If Uncle Sam is going to attend to the running of the nursery business then good business sense would demand that he appoint practical men to boss the job, so our taxes will be well spent.

BILL H. R. 5939

Providing for the experimenting of nursery stock.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Agriculture be, and is hereby, authorized to assemble, grow, and test plant material deemed desirable or suitable for use in propagating fruit, nut, and ornamental trees and other plants, for the purpose of determining stocks better adapted to the climatic soil and other conditions under which fruit, nut,

and ornamental plants are grown.

To establish and maintain mother orchards or plantations for the purpose of providing domestic sources of seeds, cuttings, or other propagating material in order that the future of the American fruit, nut, and ornamental plant interests may be insured and placed under domestic control, dependence for such stocks now being largely on foreign sources.

To investigate methods of growing stocks, study methods of propagation and to encourage the propagation of fruit, nut, and ornamental trees and other plants in this country.

SEC. 2. That there be, and is hereby, appropriated out of any moneys in the Treasury not otherwise appropriated, the sum of \$30,000 for the purpose of carrying into effect the objects of this Act, including the rental of lands, the purchase of equipment and supplies, the payment of rent, and the employment of such person or persons and means in the District of Columbia and elsewhere as the Secretary of Agriculture may deem necessary.

ARKANSAS STATE PLANT BOARD

LITTLE ROCK, ARKANSAS

June 2, 1919.

NURSERYMEN'S OBLIGATION UNDER THE NURSERY FRAUD ACT

In filing bond and securing license to do business as a nurseryman in the state you are bonded for the faithful compliance of all the provisions of both the Arkansas Nursery Fraud Act (under which license is granted you) and the Arkansas Plant Act (under which certificate of inspection is granted you). In case of judgment or collection on the bond, additional sureties must be furnished to maintain it at its original amount.

Section 5 requires that you file, once a month, with the Chief Inspector of the Plant Board duplicates of the complete invoices of sales made by you, setting forth the date of sale, the salesman, name of purchaser and name and quantity of varieties purchased.

Under the provisions of Section 6 any person who misrepresents, deceives or defrauds any person in the sale of nursery stock by substituting inferior or different varieties, or who falsely represents the age, name, class or condition of any nursery stock is subject to fine or imprisonment or both and shall be liable to the person aggrieved to the extent of all damage sustained. Be sure, therefore, that the invoice which you file with the Chief Inspector is a correct copy of the bill of goods which you send to your customer.

Section 7 provides that any person contracting to render expert services regarding horticultural practices as a part of the value received in the sale of nursery stock shall furnish satisfactory evidence to the Chief Inspector that he is competent to give such advice and shall procure a license so to do.

Prosecutions under this Act may be commenced at any time within seven years of the delivery of nursery stock.

GEORGE G. BECKER, *Chief Inspector.*

TRADE PRICES TO THE TRADE ONLY

The report of the Committee on Policy resulted in the adoption of the following resolution:—

Recognizing the great diversity of interests of the members of the National Association of Nurserymen, we offer recommendations only on such questions where the interests of all converge, and where in the silence of the Association the interests of all would suffer.

Realizing the necessity of keeping open and profitable, the outlets for the distribution of nursery stock as fundamental to the success of the industry, therefore, be it

Resolved. The members of the American Association of Nurserymen shall not sell to any consumer of nursery products, whether private owners, parks, cemeteries, realty developments, municipalities, department stores, or other large buyers at prices which do not adequately protect in his sales and distribution expenses, the nurseryman who buys similar stock to sell again, and

Whereas. The professional landscape architect buys only as an agent, for his client, the planter, therefore be it resolved.

That we disapprove of nurserymen giving their wholesale trade lists or trade prices to or through professional landscape architects.

Resolved. That any member who violates the foregoing resolution, shall forfeit his membership as provided in Article IX of the constitution.

CENSUS OF NURSERY STOCK PROPOSED

At a meeting of the subscribers to the Market Development Fund, J. Edw. Moon brought forward a suggestion that might prove of great value to the nursery business, and that was to ask the cooperation of the U. S. Government through the Department of Agriculture in compiling statistics of nursery stock through the census Bureau or to include nursery stock in the crop reports.

The object is to get information as to the amount and kind of nursery stock that is being grown.

It will be readily seen how valuable such information would be in guiding nurserymen in their planting and so avoid over supply and at the same time indicating shortages.

The information would naturally have a cumulative value. The first few years the records would be incomplete but as the statistics accumulated and it became possible to compare one year with another it would become a great factor toward stabilizing production.

Another value would be it would show the Government just where the stock was, and the amount, should occasion arise, to quarantine for any particular disease or pest. The suggestion is one that should receive serious consideration as it is in line with real progress.

The Committee on hail insurance was discharged without having accomplished the object for which it was appointed, namely to see if favorable rates could not be got for insuring nursery crops against damage by hail.

HERBACEOUS PLANTS

During the last four years, stocks and collections of herbaceous plants were allowed to run down and get very much depleted both upon nurseries and private places.

The labor conditions perhaps were the main cause. One season's neglect or even a few months at a critical season means the loss of choice varieties. It is a very common error to think this group of plants can get along without much attention. The strong growing kinds may live for years and survive weeds, drouth and adverse conditions, but these are usually kinds that everyone has a good stock of. Not so with the choice kinds of Delphinium, Phlox, Dianthus, Aquilegias, and the host of rarer alpine and improved varieties. These deteriorate and vanish as quickly as a bed of pansies or other high bred occupants of the flower garden.

Constant attention with facilities to supply the varying needs of the different kinds is the price of success and unless the nurseryman is willing to pay the price he is not likely to be successful.

The average nurseryman's catalogue shows a very poor list and usually kinds that tell the plantsman, "these are kinds that will survive neglect."

There is little profit in handling herbaceous plants as a filling in crop on a nursery. To be successful and profitable it should be handled as a separate department and stand on its own feet and when properly managed usually pays as there is a ready sale for good things properly handled.

A GARDEN

To-day, June 19th, I was in a flower garden that seemed to break every rule of what is considered correct taste and practice in gardening.

Situated on a side hill sloping slightly to the south, surrounded by trees, rose arbors, bushes, in fact anything just as it happened. The ground was not graded, banks or terraces were not even suggested, the beds were perhaps geometrical in outline but you could not tell, they were divided by grass paths that seemed to lead nowhere in particular but to be merely there so you could walk among the flowers. Trimness there was none.

There was a riot of plants, every kind it seemed, tall robust hollyhocks in pink, rose, red and maroon in a jumble with tall perennial larkspur, roses and candidum lilies seemed to dominate on this particular day, but it was easy to see there would be other days, just as gay when entirely different plants would be in bloom.

There was no attempt at color scheme or arrangement for there was no front, or back to the beds or borders, just a jumble of plants, where the stately hollyhock was just as likely to have a rose bush as a clove pink for its neighbor.

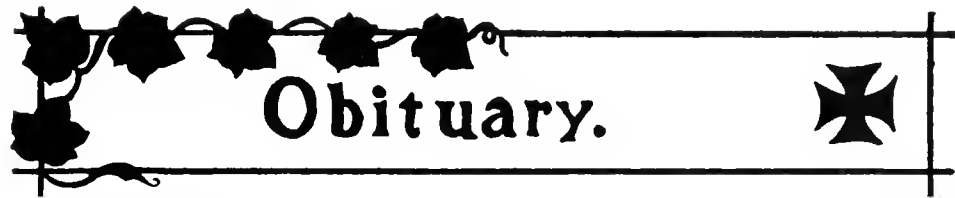
Centaureus, stocks, pansies, mint, sage, fuschias, heliotrope, marigolds, poppies and every kind of plant that you had made the acquaintance of years before were there to greet you.

It was a garden of plants, where you forgot the work in connection with gardening. The straight line, the ar-

tificial curve and studied effect were missing; you could only see plants and flowers, you could sit down, get drowsy and rest.

The landscape architect could not produce such a garden if he tried, the professional gardener would hardly be likely to, such gardens are like Topsy, they just grow. It is not a natural garden, because a natural garden would be a garden of weeds where only the fittest survive. It is merely a place where the individual plants you love and care for grow and seem at home.

Such a garden would not be everyone's taste, not be suitable for all yards but I could not help wishing I had the power to condemn all landscape gardeners who practice their profession in America to be confined in it long enough to learn that it is just plants that make a garden.



Mr. A. K. Clingman, of Horner & Keithville, La., a retired horticulturist and one of the foremost citizens of North Louisiana, departed this life at his home on June 2, 1919, after an illness of only a few moments, at the age of 70 years.

The writers having known this splendid man for many years, beg to offer the following resolution and to move its adoption by a rising vote.

Resolved by American Association of nurserymen in convention in the city of Chicago this June 27th, 1919, to receive with deepest sorrow the news of the death of our friend and coworker, Mr. A. K. Clingman. That we recognize in Mr. Clingman's death the very great loss to horticulture, particularly in the southwest, and the further loss to the world one who served well the age in which he lived.

Resolved further that a copy of this resolution be printed in the Annual Year Book of this Association, that a copy be furnished our trade Journals and a copy be sent to the bereaved family.

J. R. MAYHEW,

C. C. MAYHEW,

J. B. BAKER,

GEO. F. VERHALEN.

A report was received while the Convention was in session that Theo. Inglefritz had just passed away. A resolution was adopted to send an expression of sympathy to the family, and to "say it with flowers."

Resolution of sympathy was also adopted upon the death of C. S. Harrison, York, Nebraska, the grand old man whose life had been an inspiration to so many. It was suggested that a tree in his memory be planted by the Association.

Resolution of condolence was also adopted expressing sorrow for the death of M. J. Ragg.

Mr. F. F. Rockwell called a meeting of the subscribers to the Market Development Fund, June 12th at the Hotel Adelphia, Philadelphia, to consider plans of the National Service Bureau, to be presented at the Chicago Convention. Those present were:

Wm. Flemmer
Robert Pyle
F. L. Atkins
Isaac Hicks
Thomas Meehan
Edward Moon
Henry T. Moon
L. Lovett
J. T. Lovett, Jr.
J. H. Humphreys
John Watson
F. F. Rockwell
C. R. Burr
Erdman Cain

That the nurserymen mean business and are thoroughly interested in the movement was very evident. It was also evident that Mr. Rockwell has a rough and rugged road to travel before he reaches the point where the big vision of modern methods in advertising and business building will be clear to all.

THE TARNISHED PLANT BUG AND ITS INJURY TO NURSERY STOCK

"The typical injury to nursery stock, known as 'stop-back,' 'bush-head,' or 'bunch-head' in Missouri is the result of feeding by the tarnished plant bug. This injury has been common in the State for years, but has attracted special attention only in the last seven years.

"The main injury is done by the adults which pass the winter. Some of the late work may be done by adults maturing in the summer. The nymphs do not breed and feed on nursery stock. The principal injury is done in the spring before the dormant buds have produced a growth of more than 12 in. Later injury does occur but it is usually of little importance. Peach, pear, and cherry are most severely attacked in Missouri.

"The pest hibernates in the adult stage between the leaves of mullein and similar plants, under rubbish, leaves, and other shelter. Only a small percentage of the adults which hibernate live through the winter. The bugs are strong fliers, but collect in greatest abundance and do most damage on nursery stock near favorable breeding and hibernating places.

"In the development of the pest it passes through five nymphal stages, the second of which can not be distinguished with certainty without actually following the hourly growth and development of the nymph from the time it hatches.

"The pest oviposits largely in the blossoms of composites and nymphs feed on the sap of the same plants. 'Mare's tail' (*Erigeron canadensis*) is preferred, although the pest breeds on a variety of other plants.

"In the control of the pest, clean culture to destroy plants on which it breeds, and the destruction of favorable hibernating quarters are essential. Trap crops, sticky shields, and driving will also help to reduce the

amount of injury. Known insecticides are of little or no value. Judicious pruning will help reshape injured trees."—*Experiment Station Record*.

Mr. Mulford of the Department of Agriculture, Washington, D. C., made a plea for the National Association of Nurserymen to urge Congress to permit the use of a limited amount of money for the purpose of planting around government buildings.

Mr. Mulford describes horticultural conditions around these splendid buildings as being a disgrace, as under the present regulations there was no maintenance fund by which they could be kept up.

NURSERYMAN'S NATIONAL SERVICE BUREAU

Full Steam Ahead—and Everybody on Board!
"Well, it was a great convention!"

Nobody who was at Chicago last month is likely to forget the spirit that was manifest there as marking a turning point in the nursery industry in this country.

The biggest things are not always the most tangible. In an industry, as in any private business, it is the spirit, the mental attitude, the will to do, that is the big thing.

And the outstanding feature of the convention just closed was the determination to put the nursery business as an industry on a better and a more profitable basis. To put it, as one of the country's big and important enterprises, where it has a right to stand.

The men who left the Hotel Sherman last week, left with a new conception of the possibilities before them. And they left with a determination to achieve those possibilities. It was not a "revival" meeting either. No great burst of artificially worked-up enthusiasm, to turn over, like a hot-air balloon, and flap and flutter back down to the ground, a flabby, empty bag, as soon as the excitement is over.

We are moving forward!

That is the great point. Ways and means are important—but secondary after all. Market Development, now backed up officially by the American Association of Nurserymen, has got a solid start.

Trade organization, at least to the extent of making it possible to cut out some of the profit-killing practices that have existed in the past is actually beginning to take definite shape. And in all probability some beginning at standardization will be made before the year is out.

It has taken many years to do all these things. It took other industries many years to do them. There are some who still think that they cannot be done in the nursery business. There were always some who thought they could not be done in other businesses.

In any body of men there must always be honest differences of opinion. This was true at Chicago. But the general spirit was that something could be done; should be done; and will be done!

And one of the big things to be carried on at once, if the feeling of the membership at Chicago was any indication of the feeling in the rest of the trade, is the campaign for Market Development.

The account of the work done so far, and the plans

presented for the coming year, seemed so well worth while to those present at Chicago that the American Association voted, almost unanimously to take over and conduct the work of the Organization for Market Development, which was formed at Chicago last year.

Market Development is no panacea that will cure all nursery ills. But it is something definite and tangible that will help all nurserymen, to the extent the Association backs it up. And it may be made to help individual nurserymen, to the extent that they are wide awake and alert to the advantage of the things the Nurseryman's National Service Bureau can do for them individually.

For instance, here are some specific things that can be made to help you, in your own individual business.

ARTICLES FOR LOCAL NEWSPAPERS

During the past spring we supplied several hundred newspapers with business building articles on trees, shrubs, fruits and perennials. A similar series is being prepared for this fall and next spring. These articles are available for every member of the American Association. They will be supplied without cost, to local papers (one in a city) in the territory in which you sell.

SEND IN YOUR LIST

ILLUSTRATED LECTURES. The first of three lectures, with colored slides, "Beautify the Home Grounds," will be supplied without cost to garden clubs, improvement societies, etc. You can provide for the use of these in the territories in which you sell. Write for dates and particulars.

NOTES FROM ARNOLD ARBORETUM

RHODODENDRON (AZALEA) CALENDULACEUM. A lover of flowers who has had the good fortune to see the yellow-flowered Azalea in June on the wooded slopes of the southern Appalachian Mountains can never forget it. North America does not offer a more beautiful flower show. No other North American shrub has such brilliantly colored flowers; and no other Azalea hardy in New England can be compared with it in the variety of color found in its flowers. The flowers of the Korean *Azalea Schlippenbachii* are larger and more delicate in texture and color, and those of the Japanese *A. Kaempferi* are more surprising, for it is always a surprise to find the bright red flowers of this Azalea on a bare New England hillside. These plants when they are in flower look exotic here and do not fit our American surroundings as well as our yellow-flowered plant. The flowers, too, of the American plant remain in good condition longer than those of any of the Asiatic Azaleas, and they were not injured by the excessive heat which spoiled the flowers of many other plants. A good many plants of *R. calendulaceum* have been raised at the Arboretum from seed, and many of the seedlings which are now blooming on Azalea Path show the variation in the color of the flowers from clear yellow to flame, which adds to the interest of a collection of these plants in early June. Single plants of this Azalea have also been planted among

other shrubs on the borders of some of the drives, and these show how this Azalea can be used with advantage in New England plantations.

SOME INTERESTING ROSES. The Boursault Rose (*Rosa Lheritierana*) has not before carried more flowers than it has borne this year. This Rose, which was raised in France early in the last century, is believed to be a hybrid of *R. chinensis* and the European *R. pendulina*, and owes its popular name to Monsieur Boursault who a hundred years ago had a garden in the Rue Blanche, now Chaussee d'Antin, famous for its collection of Roses. There have been several forms of the Boursault Rose, the one in the Arboretum collection, which has pale rose red, partly double flowers, is not an uncommon plant in old New England gardens. It is a tall, vigorous and perfectly hardy shrub with gracefully spreading stems. *Rosa Marrettii* has not before flowered so freely in the Arboretum; it is a tall broad shrub with arching stems, pale green leaves, and large pink flowers. It is a native of northern Hokkaido and of Saghalien where it was discovered by the late Abbe Faurie who sent seeds to the Arboretum in 1908. This plant, which is probably still rare in cultivation, promises to be a good addition to the single-flowered Roses which can be successfully grown in this climate. The single-flowered Chinese form of *R. Roxburgii* (var. *normalis*) is flowering for the first time in the Arboretum and proves to have larger flowers than any other Rose in the collection, with the exception of *R. rugosa* and its varieties. The petals are pale shell pink and conspicuously notched at apex. The fruit of this Rose will probably be almost as ornamental as the flowers, as it is bright red, and thickly beset with long sharp prickles. One of the hardiest and best growing of the new Roses, *Rosa bella*, raised at the Arboretum from seeds collected by Purdom in northern China, is a plant which when better known will be popular. It is a large shrub with bright red flowers an inch and a half in diameter, and showy red fruit. The only plant in the collection is with the other Chinese Roses on Bussey Hill. Unfortunately the flowers were ruined as they opened by the excessive heat. *Rosa multiflora cathayensis* is again covered with its great clusters of pink flowers and expanding flower-buds. The Chinese representatives of the white-flowered *R. multiflora* of Japan, it is one of the most beautiful Roses of its class, and interesting as the wild type from which the Chinese derived the now well known Crimson Rambler Rose and another old-fashioned garden plant, the Seven Sisters Rose (*Rosa multiflora platyphylla*). *Rosa Helenae*, which some persons consider the handsomest of the Roses discovered by Wilson in western China, will be in flower again in a few days. It is a large shrub with slender arching stems furnished sparingly with small red spines and many-flowered clusters of pure white delicately fragrant flowers an inch and a quarter in diameter. It well deserves a place in any collection of single-flowered Roses, however small.

AMERICAN ASSOCIATION OF NURSERYMEN

President—J. Edward Moon, Morrisville, Pa.

Vice-President—Lloyd Stark, Louisiana, Mo.

Treasurer—J. W. Hill, Des Moines, Iowa.

Secretary for the Association—Chas. M. Sizemore, Louisiana, Mo.

Executive Committee—C. R. Burr, Manchester, Conn.; C. C. Mayhew, Sherman, Tex.; J. B. Pilkington, Portland, Oregon; J. Edward Moon, Morrisville, Pa.; E. S. Welch, Shenandoah, Iowa.

LIST OF COMMITTEES AMERICAN ASSOCIATION OF NURSERYMEN 1918-19

Finance—E. S. Welch, Chairman, Shenandoah, Ia.; E. W. Chatten, Winchester, Tenn.; T. B. West, Perry, Ohio.

Program—E. M. Sherman, Chairman, Charles City, Ia.; J. W. Hill, Des Moines, Ia.; Orlando Harrison, Berlin, Md.

Arrangements & Exhibits—Alvin E. Nelson, Chairman, Chicago, Ill.; F. R. Von Windigger, Clayton, Mo.; E. S. Welch, Shenandoah, Ia.

Hail Insurance—F. A. Weber, Chairman, Nursery, Mo.; E. P. Bernardin, Parsons, Kans.; H. D. Simpson, Vincennes, Ind.

Press & Publicity—Ralph T. Olcott, Chairman, Rochester, N. Y.; Jno. S. Kerr, Sherman, Texas; Chas. Sizemore, Louisiana, Mo.

Statistical—Henry B. Chase, Chairman, Chase, Ala.; Wm. Pitkin, Rochester, N. Y.; E. S. Welch, Shenandoah, Ia.; M. R. Cashman, Owatonna, Minn.

Landscape Architects—Thos. B. Meehan, Chairman, Dresher, Pa.; J. Edward Moon, Morrisville, Pa.; Wm. Flemmer, Springfield, N. J.

Nomenclature—J. Horace McFarland, Chairman, Harrisburg, Pa.; L. A. Berkmans, Augusta, Ga.; Chas. J. Malloy, Rochester, N. Y.

Standardization—Harlan P. Kelsey, Chairman, Salem, Mass.; F. L. Atkins, Rutherford, N. J.; Henry Hicks, Westbury, L. I.

Distribution & Directory—M. R. Cashman, Chairman, Owatonna, Minn.; James Pitkin, Newark, N. Y.; Chas. H. Perkins, Newark, N. Y.

French Relief—F. L. Atkins, Chairman, Rutherford, N. J.; W. C. Reed, Vincennes, Ind.; Paul C. Stark, Louisiana, Mo.

Annual Report—Chas. Sizemore, Chairman, Louisiana, Mo.; Paul C. Stark, Louisiana, Mo.; F. R. Von Windigger, Clayton, Mo.

Vigilance—Paul C. Stark, Chairman, Louisiana, Mo.; Robert Pyle, West Grove, Pa.; Henry B. Chase, Chase, Ala.

Arbitration—Jno. S. Kerr, Chairman, Sherman, Texas; G. A. Marshall, Arlington, Nebr.; J. M. Pitkin, Newark, N. Y.; Jno. Dayton, Painesville, Ohio; T. W. Stark, Louisiana, Mo.

Legislation—Orlando Harrison, Chairman, Berlin, Md.; Jno. Dayton, Painesville, Ohio; Robert C. Chase, Chase, Ala.; J. M. Pitkin, Newark, N. Y.; C. C. Mayhew, Sherman, Texas; F. H. Stannard, Ottawa, Kans.; Thos. B. Meehan, Dresher, Pa.

Tariff—Theo. J. Smith, Chairman, Geneva, N. Y.; Irving Rouse, Rochester, N. Y.; J. Edward Moon, Morrisville, Pa.; Thos. B. Meehan, Dresher, Pa.; James Pitkin, Newark, N. Y.

Transportation—Charles Sizemore, Louisiana, Mo.

STATE AND DISTRICT ASSOCIATIONS

American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.

California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurseryman's Association—President, Walter E. Campbell, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.

Illinois Nurserymen's Association—President, Guy A. Bryant, Princeton, Ill. Secretary, A. M. Augustine, Normal, Ill.

Massachusetts Nurserymen's Association—President, John Kirkegaard, Bedford, Mass. Secretary, David C. Stranger, West Newbury, Mass.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

New England Nurserymen's Association—President, A. E. Robinson, Lexington, Mass.; Secretary, R. M. Wyman, Framingham, Mass.; Annual meeting will be held on the last Tuesday in January in Boston.

New Jersey Association of Nurserymen—President, Carl H. Flemer, Springfield, N. J. Secretary-Treas., A. F. Meisky, Elizabeth, N. J.

New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.

Ohio Nurserymen's Association—President, H. S. Day, Fremont, Ohio; secretary, W. N. Scarff, New Carlisle, Ohio; treasurer, A. R. Pickett, Clyde, Ohio.

Oregon—Washington Association of Nurserymen—President, C. F. Breilhaupt, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.

Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.

Pennsylvania Nurserymen's Association—President, Adolf Muller, Norristown, Pa. Secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, O. W. Fraser, Birmingham, Ala.; Vice-president, H. C. Caldwell, Atlanta, Ga.; Secretary and Treasurer, O. Joe Howard, Pomona, N. C. The next meet-

ing is to be held in Birmingham the 21st and 22nd of August.

South Western Nurseryman's Association—President, W. A. Wagner, Durant, Okla. Vice Pres., J. M. Ramsey, Austin, Texas. Secretary-Treasurer, L. J. Tackett, Fort Worth, Texas. The next meeting will be held in Dennison, Texas, First Wednesday in September.

Tennessee Nurserymen's Association—President, George W. Poague, Graysville, Tenn. Secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Tennessee State Florists' Association—President, Leon Geny, Nashville, Tenn. Secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, William B. Munson, Denison, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.

Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

WANTED

ONE OF THE LEADING FIRMS at Boskoop, Holland with special culture of nursery-stock for the American market, ask sole Agency for the U. S. and Canada. Import House preferred.

Address Box 77, Care The National Nurseryman.

WANTED

Young energetic man for nursery foreman. Good wages and opportunity for advancement. Address, giving age, experience, references and wages wanted.

Elliott Nursery Company, Pittsburgh, Pa.

HELP WANTED—Nurseryman capable of handling men. Knowledge of propagating not necessary. Permanent position and good wages to the right man.

S. A. HARRIS

Tarrytown, N. Y.

WANTED—Competent stenographer, young married man preferred, with experience in Southern Horticulture, Floral and Landscape Gardening. Permanent position and good house furnished to right couple, who can furnish satisfactory references as to integrity and efficiency, address Nursery, Box 1263 Miami, Fla.

WANTED—Young man with some selling experience to call on the Florist and Nursery trade in the East and Middle West. Good opportunity open for the right party. State age, experience, references and salary expected. Address SALESMAN, National Nurseryman.

WANTED—Experienced Foreman capable of handling a nursery plant located in middle west containing sixty acres of a general line of growing stock. Must be able to handle men, understand the keeping of records and detail work. Give experience, reference and salary expected. Box 548, in care of National Nurseryman.

A Horticulturist either landscape gardener, nurseryman, florist or truck gardener who has made good, and who, for any reason desires to make a change, and has about three thousand dollars to invest, may be interested in a proposition that I have to make.

Address E. F. G. care The National Nurseryman.

FOR SALE

FOR SALE—45 acres of land, nursery, landscape and contracting business, including tools, horses and equipments, auto trucks, nursery stock, etc. Location on Boston Post Road, between Greenwich and Stamford, Conn., 30 miles from New York City, center of fashionable estates. Business 22 years in this vicinity.

BERTOLF BROTHERS, Sound Beach, Conn.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine **PROGRESSIVE** Everbearing plants, guaranteed to be **TRUE TO NAME** and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

BAY TREES

STANDARDS, 30, 40, 44, 48 inch crowns

PYRAMIDS, 6 ft., 6-7 ft., 7 ft., 8 ft.

SHORT STEMS in 6 sizes

BUSH SHAPE, 24 in. high, 15-18 in. diam.

Ready to ship now in tubs.

RAFFIA

A. A. West Coast Brand

XX Superior Brand

Red Star Brand

Bale lots or less

Prompt shipment.

Reduced Prices.

HARDY JAP. LILY BULBS

Auratum, Rubrum, Album,

Melpomene, Magnificum, etc.

Late Fall shipment.

Bamboo Canes

Dutch Bulbs

Paeonies, etc.

Write for prices, etc.

McHUTCHISON & CO.

95 Chambers St.

New York



List and Prices Ready Season - 1920

If interested mail business card or letter head. We want you on our mailing list.

HOWARD ROSE CO., Hemet, Cal.

AMERICAN FLORIST'S TRADE DIRECTORY

Price \$3.00, Postpaid

For Sale By

NATIONAL NURSERYMAN PUB. CO. Inc.,
HATBORO, - - - PA.

HARDY PERENNIAL PLANTS

Phlox, Iris, Delphiniums, Shasta Daisies and many other perennials. Send us your want list for prices or ask us for wholesale price-list.

WILLIAM TOOLE & SON,
Hardy Plant & Pansy Farm,

Baraboo

Wisconsin

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myroblan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

.. STRAWBERRY PLANTS ..

Summer and Fall bearing varieties, shipped to you or direct to your customer under your tag.

Plants and service that pleases both you and your trade.

Let us quote you

V. R. ALLEN,

59 Lane Avenue

Seaford, Del.

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades, also

Grape and Currant Cuttings and Light Grade of Vines for
Lining Out in Nursery Rows

WRITE FOR PRICES

F. E. Schifferli,

Fredonia, N. Y.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance.

FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials.

Send us your want list.

Inspect our stock.

The Gardeners' Chronicle

(Established 1841)

The BEST and OLDEST horticultural paper in England. Price 4d per week.

Send for free copy and subscription rates to:—

The Publishers, 41 Wellington St.

W. C. 2, London, England



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address
The Florists' Exchange, P. O. Box 100, Times Square Sta.

ALL "AMERICAN NURSEYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS. ENGLAND

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.

147 Summer St.

Boston, Mass.

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries
Raspberries
Blackberries
Dewberries
Berberry

Currants
Gooseberries
Grape Vines
Privet
Spirea

Rhubarb
Asparagus
Horseradish
Hardwood Cuttings
Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE

OHIO

A Large Stock of

Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES and SHRUBS. All stock clean and thrifty, the best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO.

OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1919

Apple, 2 year, fine Ben Davis, Black Ben Davis, Gano, Delicious, Lowry, Rome Beauty; Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; Evergreens—Norway and Hemlock Spruce, Deodar Cedars, Irish Junipers, California Privet, 2, 3, and 4 year; Sugar Maple Seedlings, six inches to ten feet.

Write us for prices.

We sell to THE TRADE only, and make a specialty of

OREGON CHAMPION GOOSEBERRY PERFECTION CURRANT CLEAN COAST GROWN SEEDLINGS

We also have growing for fall delivery a large assortment of general nursery stock, including Fruit, Shade, and Ornamental trees, Roses, Etc.

Head Quarters for Nursery Supplies.

Correspondence invited.

Portland Wholesale Nursery Co.

122½ Grand Avenue,

Portland, Oregon

When writing to Advertisers please mention the National Nurseryman.

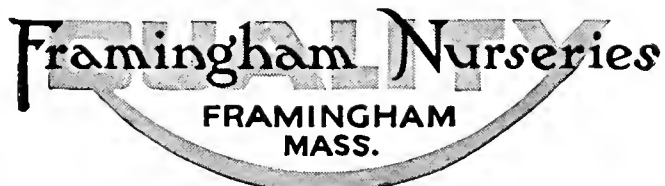
FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.



NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and
PRINTED IN ANY MANNER that may be called for

*Prices as low as First-Class Work and Unequalled Promptness in
Delivery will justify.*

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

RAFFIA

Another shipment just received
Containing Our Usual Brands

SEND FOR PRICE-LIST

Thomas B. Meehan Co.

DIRECT IMPORTERS

Dresher - - Penna.

Subscribers to "Nurserymen's Fund for Market Development."

New Crop N. C. Peach Pits

All old Pits sold. Write for full information on new crop. Supply limited. No time to lose.

J. Van LINDLEY NURSERY CO.
Pomona, N. C.

Subscribers to Market Development Fund.

Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

Write for our List

Cannas, Dahlias and Gladioli

C. BETSCHER, Dover, O., U.S.A.

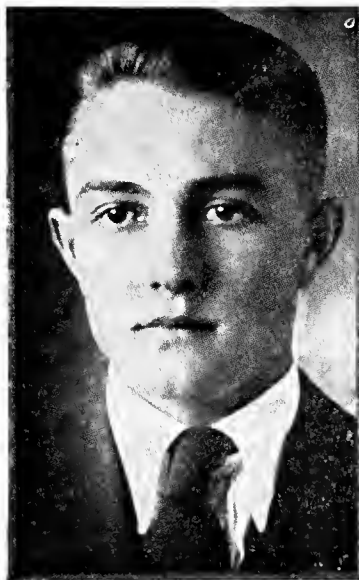
Did You Meet Us At The Convention?



Orlando Harrison



G. Hale Harrison



Henry L. Harrison



George A. Harrison

NURSEYRMEN

ORCHARDISTS

BADGE NO. 2

We will gladly give you any information you may desire about our present stocks and prices. You will find it worth your while to look us up.

A partial list of what we will have to offer you:

APPLE TREES—TWO YEAR, BUDDED

Alexander	Red Astrachan
Ben Davis	R. I. Greening
Fameuse	Stark
Gravenstein	Tompkins King
Grimes	Wagner
Gano	Winter Banana
Horse	Wolf River
Jonathan	Yellow Newtown
Northern Spy	

APPLE TREES—ONE YEAR, BUDDED

Baldwin	Paragon
Ben Davis	R. I. Greening
Delicious	Rome Beauty
Gano	Stayman
Gravenstein	Wealthy
Grimes	Williams
Jonathan	Winter Banana
McIntosh	Winesap
Northern Spy	Yellow Transparent
Northwestern	York Imperial
Oldenburg	

PEACH TREES—ONE-YEAR, BUDDED

Belle of Georgia	Hiley
Brackett	Iron Mountain
Carman	Krummel
Champion	Late Crawford
Early Wheeler	Levy
Elberta	Mamie Ross
Fox	Mayflower
Francis	Ray
Greensboro	Rochester
Hale	Salway
Heath	Slappey

MAPLE, NORWAY

5000	8 to 10 ft., 1¼ to 1½ in.
6000	10 to 12 ft., 1½ to 1¾ in.
7000	12 to 14 ft., 1¾ to 2 in.
8000	14 to 16 ft., 2 to 2½ in.
9000	2½ to 3 in.
8000	3 to 3½ in.
3000	3½ to 4 in.
1000	4 inch.

HEDGE PLANTS

California Privet

5000	12 to 18 in.
5000	18 to 24 in.
5000	2 to 3 ft.
7000	3 to 4 ft.
8000	4 to 5 ft.
9000	5 to 6 ft.

SPECIMENS

2000	5 to 6 ft. high, 3 ft. broad
------	------------------------------

BARBERRY, THUNBERGII

8000	6 to 12 in.
9000	12 to 18 in.
10000	18 to 24 in.
8000	2 to 3 ft.
3000	2½ to 3 ft.

HARRISONS' NURSERIES, Nurserymen Orchardists **BERLIN, MARYLAND**

Subscribers to "Nurserymen's Fund for Market Development."

Press of Robinson Publishing Company, Hatboro, Penna.

72

27/8

758



THE NATIONAL NURSERYMAN



AUGUST 1919

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

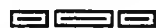
Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large assortment of high quality Nursery
Stock for the Wholesale Trade.
Fruit Trees, Small Fruits, Ornamental Trees,
Shrubs, Roses, and Vines.

A FINE LOT OF

Elm, American White, all sizes

Wanted — Hansen Hybrid Plums and Compass

Ask for Trade Lists. Write us about your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants

Everbearing and Standard

From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company

Strawberry Specialists,

Salisbury, - Maryland

Subscribers to "Nurserymen's Fund for Market Development."

Be a regular Customer, for we have a complete line of stock grown and cultivated to the highest standard, for a particular retail trade.



C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock

WHY WORRY

The kinds of Ornamental Nursery stock heretofore most heavily imported from Europe are just the lines in which we have always specialized. And, fortunately, we have considerably larger stocks available for this season than ever before.

Write us about

ROSES, especially Hybrid Teas

LILACS

DUTCHMAN'S PIPE

AMPELOPSIS VEITCHII

HYDRANGEAS

PAEONIES

CLEMATIS, large flowering

and any other articles you may have previously imported. In fact, write us about all your needs. We grow a pretty complete assortment and if we haven't an article ourselves we can often tell you where to get it.

Use printed stationery. We sell only to the trade.

Jackson & Perkins Company
Newark, - New York

The
Preferred
Stock

The
Preferred
Stock

THE BEST IN NURSERY PRODUCTS

EVERGREENS

ARBOR VITAE AMERICAN, Compacta, Conica Densa, Globosa, Hovey's Golden, Pumila and Pyramidalis. Box pyramidal and bush form. Fir, Balsam, Cephalonian, Concolor, European Silver and Nordman's. Juniper Alpina, Cracovian, Irish and Sabina. Pines, Excelsa, Mugho, Scotch and White. Retinispora Argentea, Filifera, Filifera Aurea, Liptoclada, Lycopodoides, Obtusa Aurea, Pisifera, Pisifera Aurea, Plumosa, Plumosa Aurea and Squarrosa Veitchii. Spruce, Hemlock, Norway, Oriental, Polita, Pyramidal and White. Yew, Cuspidata and Elegantissima.

Apples, Pears and Cherries, Deciduous Trees,
Shrubs, etc.

Send us your list of wants

HOOPEs, BRO. & THOMAS COMPANY
THE WEST CHESTER NURSERIES

West Chester, Pa.

Established 1853

Incorporated 1907

BAY TREES

STANDARDS, 30, 40, 44, 48 inch crowns

PYRAMIDS, 6 ft., 6-7 ft., 7 ft., 8 ft.

SHORT STEMS in 6 sizes

BUSH SHAPE, 24 in. high, 15-18 in. diam.

Ready to ship now in tubs.

RAFFIA

A. A. West Coast Brand

XX Superior Brand

Red Star Brand

Bale lots or less

Prompt shipment.

Reduced Prices.

HARDY JAP. LILY BULBS

Auratum, Rubrum, Album,

Melpomene, Magnificum, etc.

Late Fall shipment.

Bamboo Canes

Dutch Bulbs

Peonies, etc.

Write for prices, etc.

McHUTCHISON & CO.

95 Chambers St.

New York

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

COLLECTORS OF TREE SEEDS

THE

North-Eastern Forestry Co.

CESHIRE

...Connecticut...

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

PROTECT YOUR TRADE

by supplying stock from the

PAINESVILLE NURSERIES

The Storrs & Harrison Co.

NURSERYMEN - FLORISTS - SEEDSMEN

PAINESVILLE, OHIO

Established 1854

1200 Acres

Subscribers to "Nurserymen's Fund for Market Development."

We would be glad to receive your Want List

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

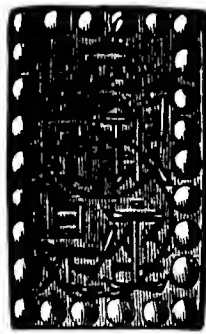
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
and
HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

73 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

Our usual general assortment of Nursery Stock to offer for Fall 1919

APPLE
PEACH
CHERRY
PLUM
SHRUBS
VINES, Etc.

Head quarters for Norway Maple
and American Elm.

C. M. Hobbs & Sons
Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

Vincennes Nurseries, W. C. REED, Prop.

VINCENNES, - - INDIANA

We are pleased to offer for Spring or Fall:

CHERRY, 2 year X X 1 inch up, also $\frac{3}{4}$, $\frac{5}{8}$ and lighter grades.

CHERRY, One year $1\frac{1}{16}$ up, $\frac{5}{8}$ & $\frac{1}{2}$ to $\frac{5}{8}$

Our Blocks of Cherry are largest to be found in U. S.

We bud annually 500,000 Cherry, they are making splendid growth.

Peach, One Year, all grades leading Varieties.

Plum, Japan and European, One and 2 year.

APPLE, 2 year, a few cars for late fall shipment.

Grafted Hardy Northern Pecans.

Car Lots a specialty, also fair assortment of Ornamentals.

Subscribers to "Nurserymen's Fund for Market Development."

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

I have sold all the stock I will have this Spring, but this Summer I will be ready to book orders for Fall, 1919 and Spring 1920 delivery.

The war is over and good times are ahead. No more guns or ammunition will be needed, but you will want more of my Grape Vines, Scarlet and Crimson clover and Cow-Peas than ever before.

Keep me in mind.

CHAS. M. PETERS

P. O. Address Salisbury, Wicomico County, Maryland.

Long Distance 'Phone and telegraph, Salisbury, Maryland.

STRAWBERRY PLANTS

All of the best Standard and Everbearing varieties, we will ship to you, or direct to your customers. Plants guaranteed first class and true to name. New Land Grown. We tie strawberry plants in bundles of 26 for 25 and pack in ventilated boxes with damp moss. Shipping season for strawberry plants, October 20th to May 10th. We are located in the largest strawberry center in the world, and have the soil and climate to produce the best in strawberry plants.

FROM NEW JERSEY

Gentlemen: We herewith enclose our check in full as per your statement of May 26th. We are pleased to advise you that all plants reached us in good condition, shipments were prompt and plants first class, we are very much pleased with your service.

May 28, 1919.

FROM VIRGINIA

Dear Sirs: Strawberry plants arrived promptly in good condition, the plants were fine, will be glad to give you our future strawberry business.

April 19, 1919.

We also offer Asparagus roots 1 and 2 yr., 1 yr. grape vines, Concord and Niagara.

Correspondence solicited.

Bunting Nurseries, G. E. BUNTING & SONS

Selbyville—Delaware

Subscribers to "Nurserymen's Fund for Market Development."

**Small Fruit Plants
and Shrubbery for the
Wholesale Nursery
Trade.**

List ready September 1st.

P. D. BERRY & SONS

Dayton

Ohio

Hill's Evergreens

SINCE 1855

Complete stock of leading varieties in Firs, Spruce, Pines, Arborvitae's, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

The D. Hill Nursery Co., Inc.

Evergreen Specialists.

Largest Growers in America.

Box 401, Dundee, Illinois

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Fall 1919

250,000 Cal. Privets in grades, 1, 2, and 3 yrs.

300,000 Asparagus, 2 and 3 yr., Asst.

Barberry Thun., 18-24 in. and 2-3 ft.

Lombardy Poplars in grades 6 to 16 ft.

Oriental Planes in grades 6 to 12 ft.

Tulip Poplars, 6-8 ft.

Horse Chestnuts in grades 7 to 12 ft.

Catalpa Speco in grades 8 to 12 ft.

Butter Nuts 4 to 8 ft., in grades.

Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft., Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft. and 4-5 ft., Hydrangeas P. G., 2-3 ft. Write for Prices.

We are now ready to quote lowest prices on

**FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS**

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 William St. New York, N. Y.

BAILEY'S STANDARD CYCLOPEDIA OF HORTICULTURE

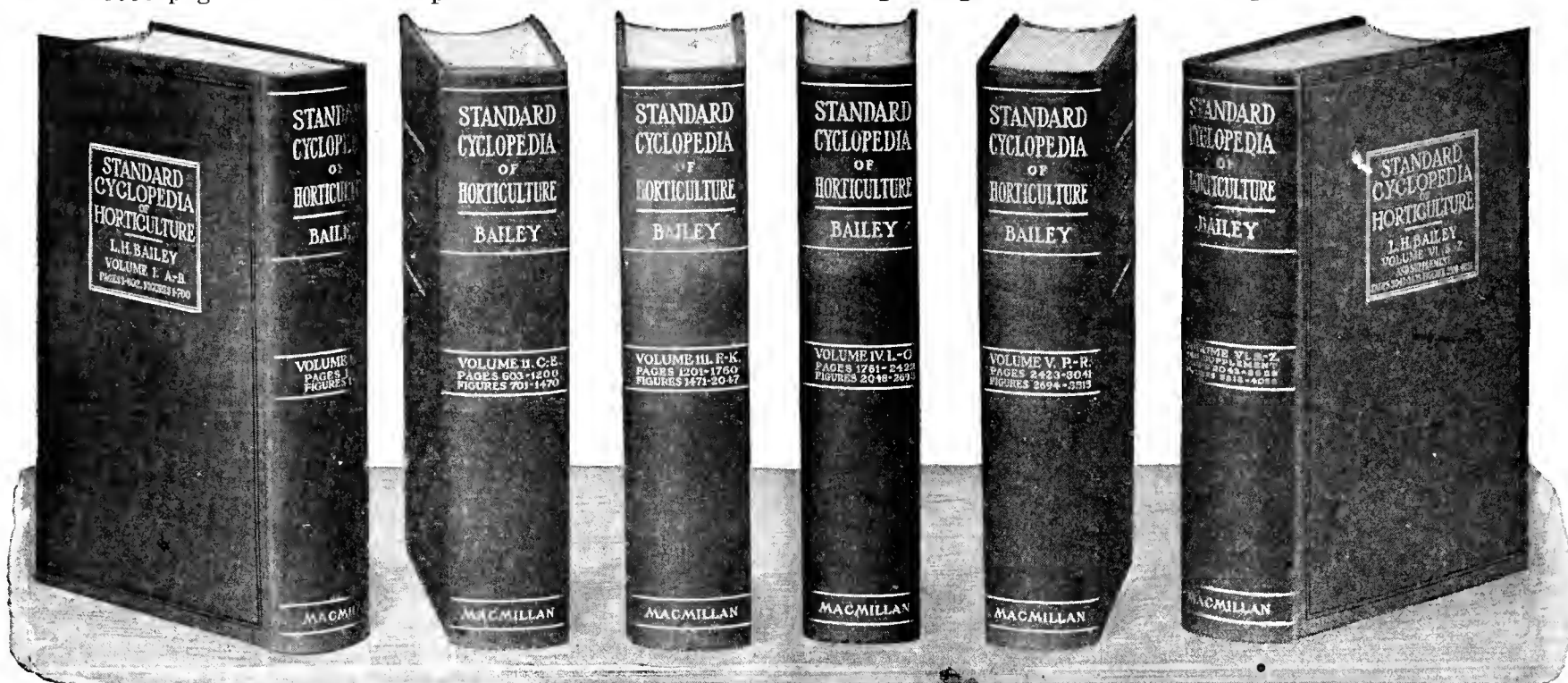
More than
3600 pages

24 full page
exquisite
color plates

96 beautiful
full page
half-tones

More than
4000 text
engravings

Approximately 4,000 genera,
20,000 species and
40,000 plant names



The complete set of six volumes, bound in decorated buckram, will be delivered to you for only \$3.00 down and \$3.00 a month for 11 months, until the full amount of \$36.00 has been paid. Cash price is \$35.00.

THE New Standard Encyclopedia of Horticulture has been freshly written in the light of the most recent research and experience. It is not merely an ordinary revision or corrected edition of the old Encyclopedia, but it is a new work from start to finish with enlarged boundaries geographically and practically; it supercedes and displaces all previous editions or reprints of every kind whatsoever. It is the fullest, the newest, the most authoritative of all works of its kind and constitutes the most conscientious attempt that has ever been made to compress the whole story of our horticultural thought, learning and achievement into one set of books. The owner of the Standard Encyclopedia of Horticulture will have at hand in this work a means of quickly satisfying his need for authoritative information. It is both an Encyclopedia and a Manual. Amateur and professional alike may quickly identify any plant, shrub or fruit contained within the set, and then receive expert instructions for its cultivation.

A FEW OF THE MANY IMPORTANT NEW FEATURES

Key to Identification of Plants

This is a device to enable one to find the name of a plant. The name thus found is quickly referred to under its alphabetical location, where full information will be found in regard to it.

The key is so simple that it is useful to the veriest amateur and to the botanist or commercial expert.

Synopsis of Plant Kingdom

This is one of the most important features of the new edition. It constitutes a general running account of the classes, orders and groups of plants, with a brief sketch or characterization of 215 of the leading

families, comprising those that yield practically all the cultivated plants. These family descriptions give the botanical characters; the number of genera and species and the ranges; a list of the important genera; brief statements in regard to the useful plants; and diagrammatic illustrations.

Illustrations

There are 24 colored plates; 96 full page half-tones; and more than 4000 engravings which serve as guides in the text. These color plates constitute the best possible combination of expert horticultural color photography and color printing, with a mastery in selection such as only Dr. Bailey's knowledge can supply.

The publishers of THE NATIONAL NURSERYMAN have made arrangements with The MacMillan Company to supply a limited edition of this set to their readers on monthly terms—see coupon—and we can unqualifiedly recommend the work.

A Sixteen Page Prospectus will be Sent on Request

THE NATIONAL NURSERYMAN, Hatboro, Pa.

The Glossary

This is an analysis of all technical terms that are used in the work and in similar works. It comprises botanical and horticultural terms with brief definitions.

Translation and Pronunciation of Latin Names

In Volume I is inserted a list of between 2000 and 3000 Latin words used as species—names of plants, giving the English equivalent or translation and the pronunciation.

Class Articles

Special effort has been made to secure the best cultural advices for the plants requiring peculiar or particular handling. Here are some of the titles of these articles: Ants; Autumn Gardening; Bedding; Diseases; Drainage; Floral Designs; Formal Gardening; Hotbeds and Coldframes; Insects; Landscape Gardening; Lawn Planting; Orchards; Rock Gardening; Sub-tropical Gardening; Tools and Implements; Village Improvements; Window Boxes, etc.

General Index

The final volume contains a complete index to the entire work, enabling the reader to locate volume and page of any subject he has in mind.

The National Nurseryman, Hatboro, Pa.

Enclosed find \$3.00 for which send me the "Standard Encyclopedia of Horticulture" in buckram, and I agree to pay you \$3.00 per month for 11 months until the full amount of \$36.00 has been paid (Or cash with the order, price \$35.00).

Name

Address

Reference

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

F. & F. NURSERIES

Springfield, N. J.

Our SPECIALTY

Growing evergreens for lining out on contract.



List and Prices Ready
Season - 1920

If interested mail business
card or letter head. We want
you on our mailing list.

HOWARD ROSE CO., Hemet, Cal.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobolan Plum and
Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a
large assortment. My Catalogue contains complete list with
Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

STRAWBERRY PLANTS

Summer and Fall bearing varieties, shipped to you or
direct to your customer under your tag.

Plants and service that pleases both you and your trade.

Let us quote you

V. R. ALLEN,

59 Lane Avenue

Seaford, Del.

WE OFFER

Grape Vines, Currants and Gooseberries
in all varieties and grades, also

Grape and Currant Cuttings and Light Grade of Vines for
Lining Out in Nursery Rows

WRITE FOR PRICES

F. E. Schifferli,

Fredonia, N. Y.

AMERICAN FLORIST'S TRADE DIRECTORY

Price \$3.00, Postpaid

For Sale By

NATIONAL NURSEYMAN PUB. CO. Inc.,

HATBORO,

PA.

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing

Ask for Prices.

We are the printers of this Magazine

Are You Troubled

with lost or "astray" shipments of nursery stock,
to say nothing of other difficulties experienced
through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it
up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a
reputation for giving you "what you want when
you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

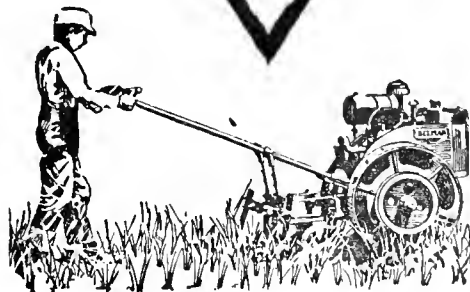
West Chester, Pennsylvania

BEEMAN

1 HORSE TRACTOR

It Plows, Cultivates, Harrows,
Mows, Does 1 horse work at
½ horse cost, successfully
operated by unskilled la-
bor. Thousands of
pleased users. Does
not pack ground.
Turns sharp cor-
ners, goes
close to fen-
ces. Use-
ful the
yr. ar-
ound.

\$285
f. o. b.
Factory



The Original Garden Tractor

also a 4 h. p. gas engine
that operates pumps,
washing machine, cream
separator, churn, grinder
and does other belt work.
Moves from one job to an-
other under its own power.

Write for interesting
free booklet giving full in-
formation.

Beeman Garden Tractor Co.

322 Sixth Avenue

South Minneapolis, Minn.

IBOLIUM

THE NEW
HYBRID

To be sent out in Fall 1919.
THE ELM CITY NURSERY CO.

HARDY PRIVET

(L. Ibota x Ovalifolium)

More about it later.
Woodmont Nurseries, Inc.

Introducers of BOX-BARBERRY
NEW HAVEN, CONN.

When writing to Advertisers please mention the National Nurseryman.

Princeton Pointers

POINTER No. 1—ASSORTMENT. Carolina Poplar and Weeping Mulberry; Cornus Alba and Own Root Lilacs; Dwarf Boxwood and Rhododendrons; Norway Spruce and Retinisporas; Roses, both Species and Named Varieties; Clematis Paniculata and Wisterias; Perennials; Inch and larger Fruit Trees for special retail trade.

Your whole assortment can be purchased here. Get it all in one place. Isn't it better to pay one freight charge and save box charges by using a bulk car?

POINTER No. 2—TRANSPORTATION. On the Pennsylvania main-line. Shipments move quickly in any direction.

POINTER No. 3—QUALITY. It's all grown here at Princeton. It's the stock that doesn't need re-grading. It delivers. It's dug-to-order. No storage.

POINTER No. 4—SERVICE. Prompt shipments, the day you order them shipped. Rush orders on twenty-four hours notice.

Consider the above when ordering. Remember, if you haven't tried "PRINCETON PRODUCTS" you're going to some day.

Princeton Nurseries

Princeton

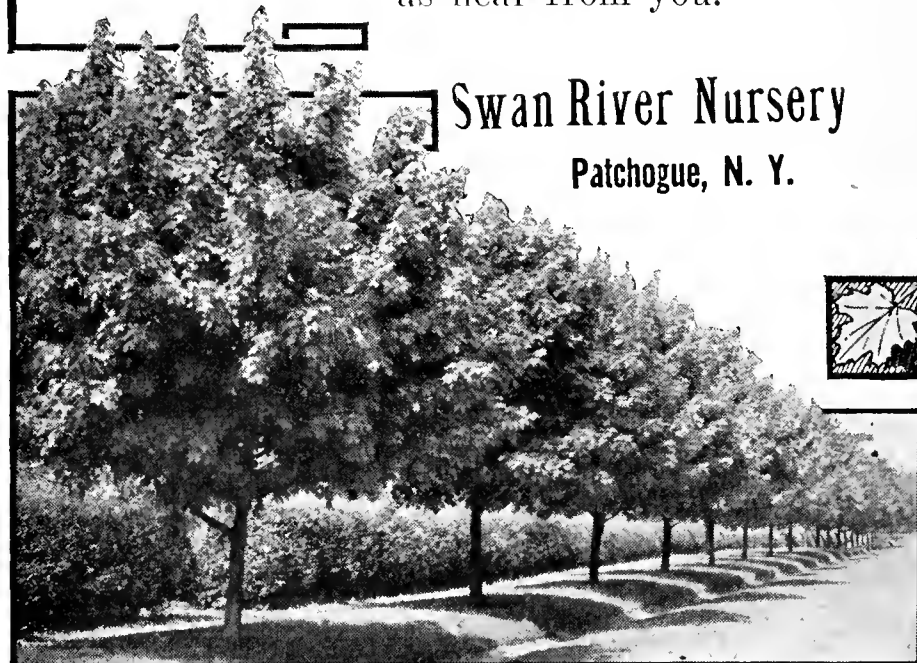
New Jersey

August First.

Good Norway Maples never fail to furnish shade. If you are not recommending

Norway Maples

to your customers at this time, they will later wonder why you did not. Never hesitate to endorse Maples, as all people like them. Our stock is exceptionally good, the trees have fine roots, full tops and will caliper from 1 to 3½ inches. Delivery by truck within fifty miles of New York. Let us hear from you.

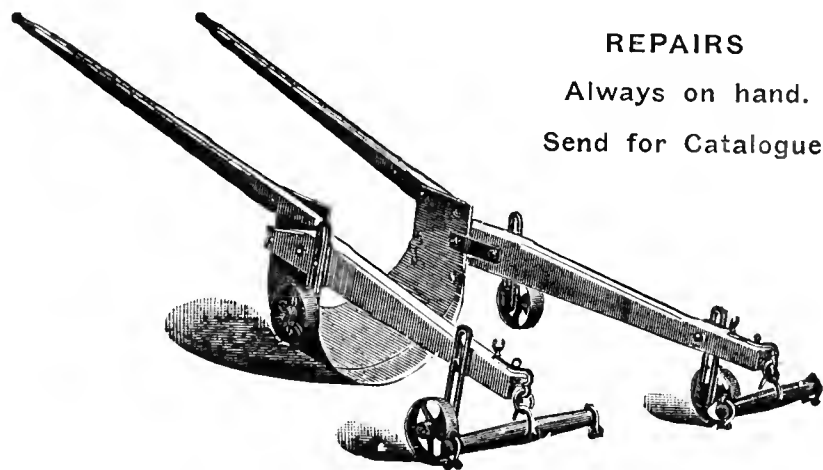


Swan River Nursery
Patchogue, N. Y.

1857

1919

BRAGG'S COMMON SENSE TREE DIGGER



REPAIRS
Always on hand.
Send for Catalogue

Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.

KALAMAZOO, MICH.

Ornamental Nursery Stock

TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS PLANTS

Large assortment. Long list of varieties and sizes

Get our New Trade Catalogue,—ready September.

Spring price list out of date.

Thomas B. Meehan Co.

WHOLESALE NURSEYMEN,

DRESHER

PA.

Subscribers to "Nurserymen's Fund for Market Development."

CHAMPION NURSERIES, Perry, Ohio

Offer the Following Stock

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6. to 8 ft., 8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4 ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet, California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSEYSTOCK

The National Nurseryman Publishing Co., Incorporated

Vol. XXVII.

HATBORO, PENNA. AUGUST, 1919

No. 8

Honeysuckle Hedge



Honeysuckle trained on a fence gives a beautiful hedge-like effect

There are few places either large or small on which there is not a demand for a hedge of some kind or other and the nurseryman is often at a loss to know just what to use.

Some time the position calling for a hedge is not one in which the plants usually used for hedges will grow successfully. Maybe it is too shady, or the ground too rocky or there may be a dozen other reasons why the

regulation Privet cannot be used satisfactorily.

For unusual conditions and places the possibilities of the Common Honeysuckle, *Lonicera Halleana* should not be overlooked. It can hardly be classed as a hedge plant as it is a vine, but given the proper support it will form one of the most satisfactory hedges it is possible to get as attested by the accompanying photograph.

From a practical point of view it is all that can be desired when properly established and cared for.

To secure a good honeysuckle hedge a fence is necessary, preferably of wire with not larger than a six inch mesh to support the vine.

Plant the vines about two feet apart in well prepared holes and they will cover a fence six feet high in one season.

Little attention is required the first year, but it is very essential that all the straggling ends be clipped off close every spring. This annual clipping is all the attention required to keep it uniform and insure a good crop of flowers.

KEEP UP AND EXTEND YOUR ACQUAINTANCE WITH PLANTS IN YOUR NURSERY

It matters little how well posted a man may be on plants if he does not renew acquaintance with them annually in their growing and flowering season they are very liable to pass out of his recollection.

For this reason alone it is worth while to take stock on the nursery.

Plants will suggest themselves for propagation or special attention.

It is not so much the new things as properly growing and exploiting the worthy old ones that is likely to be profitable.

Today, July 7th, I came across the *Stewartia pentagyna grandiflora* in flower in the nursery. What a beautiful thing it is. As a flower it will compare favorably with some of those choice exotics that need greenhouse protection to keep them alive, yet here is a hardy shrub, a native of Georgia almost unknown in nurseries.

Some wise nurseryman will work up a stock of it and feature it. It is a sure winner for it would be difficult to find a lady customer who could see one in flower and not order it.

It produces seed very readily which should be sown as soon as ripe. It may be propagated by cuttings made from half ripened wood in late summer or by layering.

Another plant was noticed that may turn out a good thing, a variegated plant of *Berberis Thunbergi*. It certainly looked attractive if it will retain its present color under propagation, but so many of these "sports" revert back to the type when they are grown under different conditions.

Going through the nursery, taking stock made the mind hark back to student days at Kew, when all those ranking as gardeners were allowed three quarters of an hour on certain days of the week to wander at will in any part of the gardens to become familiar with the different plants. While perhaps the privilege was abused by a certain percentage of the gardeners, it meant a great deal to

those who wanted to learn, and it is safe to say that all regretted they did not make even better use of the arrangement. It is a plan that is worth consideration on commercial nurseries in America as a means to encourage interest of the younger element of employees.

SOME TREES GET HARDIER WITH AGE

David Fairchild says:— The experience of the U. S. Department of Agriculture in testing introduced trees for hardiness has shown that much is to be gained by giving the young trees adequate protection during their babyhood, when they are naturally less hardy than at a more advanced age.

This has long been known to nurserymen who practice various methods to protect the trees until the wood is old enough to stand the winters without protection.

Some plants when left to themselves are killed back year after year until they manage to pull through a mild winter when their troubles are apparently over.

A good illustration of this is the *Paulownia imperialis*. This tree is a very rapid grower and each succeeding year sends up a vigorous growth, the killing back seems to accumulate strength in the root for after being killed back for several years it will make a trunk fifteen to twenty feet in one season in rich ground and is truly a wonder plant to those not familiar with the cause.

To preserve the trunk all that is necessary is to wrap the trunk in newspapers to keep the sun off them during the winter.

The English Walnut and *Magnolia macrophylla* are other trees that are very tender while young yet if they are protected in their youth are hardy enough to develop into fine trees in the latitude of Philadelphia.

THE "AMERICAN SEEDSMAN"

At the Chicago Convention we had the pleasure of making the acquaintance of a journal devoted to the seed trade and affiliated interests.

We take this belated opportunity to welcome the American Seedsman and wish it a long, useful and profitable career.

It has a wide and rich field to cultivate and judging from its first issues it has the ability to make good.

It says little about itself but much about seeds. This is a good sign. It is published at 332 South La Salle St., Chicago.

THE HAPPY RELEASE

Mrs. DE SMYTH-JONES—"Now I want you to save me an extra supply of flowers next week. My daughter Alice is coming out, you know."

PROPRIETOR OF STALL—"Yes, mum, I'll save 'er the very best, pore thing. Whatever was she put in for?"—*Saturday Journal (London)*.

The Propagation and Growing of the Rose

Paper read by E. G. Hill before the American Association of Nurserymen at Chicago, 1919

I take it as an unusual honor to receive an invitation from your society to address you on the subject assigned, for the reason that you have so many competent gentlemen within your own organization who could do this subject the fullest justice.

The Rose is pre-eminent among flowers. It still stands unrivalled in popularity, as it has from time immemorial; Sappho sang its praises and historians and poets paid homage to its beauty throughout the ages, and because of its firm hold upon the people, through sentiment and association, in love and in war, in sickness and death, in garlanding the marriage altar, in extending refreshment to friends, it has come to have a substantial pecuniary value. It takes little urging to persuade the owner of a home or the possessor of a plot of ground to invest in a planting of garden Roses.

With this standing of the Rose in the public mind it would seem a matter of real interest to the gentlemen of this association and of the nursery trade at large to find it not only interesting but profitable to increase your plantings of the Rose, and especially to disseminate the new and improved varieties.

Our country is so wide in extent, and so variable as to climate, that Roses suited to one section may be absolute failures in others, hence the need of supplying suitable sorts for given localities. The knowledge necessary to make such selection requires long and careful study and can be made complete only by personal experiment, and in this experiment many points, considered singly or in various combinations, must be taken into account; notably drainage, composition of the soil, exposure, temperature, humidity and the behavior of the variety in response to these conditions.

CLIMBERS AND WICHURAIANAS

The climbers and the Wichuraianas should be better known, and their individual characteristics fully appreciated, for they succeed in nearly all sections of the country except perhaps in portions of the Northwest and in the extreme South; our present varieties in these two classes are the pioneers of garden planting among the masses of our people. However, varieties more resistant to severe cold are needed for the Dakotas and that latitude. In the South the tendency to continuous growth is apt to lessen the vitality of the Rose, but in the Gulf territory and in California, the climbing Teas and Noisettes prove highly satisfactory. Lamarque, Gold of Ophir, Sol-farterre, Gloire de Dijon and that wonderful Rose, the Marechal Niel, with the climbing sports of certain Teas and H. T.'s like Kaiserin Augusta, Meteor and others, give a fine choice of color subjects in trellis Roses.

These tender climbers suffered considerably in the terrible Winter of 1917-18, but this Spring they are again a mass of bloom and brilliant color, reinstating themselves in the favor of all who love Roses.

Some of the most satisfactory varieties in the hardy

climbing section are Dorothy Perkins and White Dorothy, Dr. Van Fleet, Tausendschon, Excelsa, Mary Lovett, Silver Moon, Bessie Lovett, Gardenia, American Pillar and Graf Zeppelin; this list could be extended considerably to include other excellent sorts.

If I wished to make friends for the Rose—and incidentally for my own business—I should recommend to the novice the dwarf polyantha type of Rose for these invariably succeed even under adverse circumstances. They are hardy, wonderfully free in bloom and absolutely continuous bloomers up to the killing frosts about Thanksgiving Day in our Middle Western States; beginners in Rose culture should be urged to make their first experiments with these lovely bouquets of “baby” blooms. Among the true and tried are Erna Teschen-dorff, Mme. Levasseur, Catherine Zeimet, Mrs. Cutbush, Clotilde Soupert and Mme. Gouchault.

What the Rose loving public demands are the “ever-bloomers,” and we may as well say at once that outside of the Polyanthas the “everbloomer” is an impossibility so far as the production of bloom during July and the first half of August is concerned.

TEAS AND HYBRID TEAS

Among the Teas and Hybrid Teas, after the flush of June bloom is past, there invariably comes an interval of rest, lasting until cooler nights herald the approach of Autumn; then comes the great show of the Summer, lasting till it is cut short by frost. After a most critical scrutiny of the fine collections at the Trial Gardens at Washington, D. C., the trial beds at Dreer's Riverton (N. J.) place, John Cook's at Baltimore, Bobbink & Atkins' at Rutherford, N. J., and other noted collections, the following 25 sorts seem to constitute the very finest of the Hybrid Teas; in making up this list I have first of all considered constitution and vigor, combined with shapeliness of form, good color and free production of bud and bloom. Fragrance must be present for milady's bouquet, but is not so essential where the mass of color is the aim, though Rose perfume is a delight to the senses wherever its subtle fragrance is. The 25 H. T.'s for bedding are as follows:

Radiance, Red Radiance, Lieutenant Chaure, Hoosier Beauty, Gen. MacArthur, Gruss An Teplitz, Geo. C. Waud, Janet, Indiana, Lady Ursula, Lady Ashtown, Mme. Caroline Ttestout, Konigin Carola, Mrs. Wakefield, Christie Miller, Mme. Jules Bouche, Lady Alice Stanley, Killarney Queen, Ophelia, Mrs. A. R. Waddell, Mary, Countess of Ilchester, Robin Hood, Columbia, Los Angeles, Duchess of Wellington, Dorothy Page Roberts.

The varieties Wm. R. Smith, Baldwin, Pink and White Cochet, Kaiserin Augusta Victoria, Antoine Rivoire, Lady Hillingdon and Melanie Soupert will find a host of friends wherever climatic conditions favor their growth and development.

The Hybrid Perpetual class is better known by the

men of your association than by myself, though I still have clear cut pictures in my mind of those magnificent sorts Frau Karl Drusehki, Paul Neyron, Ulrich Brunner, General Jacqueminot, Anna de Diesbach, Alfred Colomb and Hugh Dickson; these are still widely known.

The Rugosa has a future for the hybridist and from the admixture of the blood of this rugged species will come beautiful varieties for the colder climes of Canada and of this country. This we may now anticipate with certainty, for are they not already arriving. The need of novelty, of new Roses, holds good with the nurserymen in only less degree than with the florists. At one of our exhibitions in New York City a prominent lady thus criticized the Rose growers: 'You florists have compelled me for the past ten years to put before my guests, time after time, three or at most, four varieties of cut Roses; why don't you give us a wider choice? What would you think if we women wore the same flowers in our hats year after year?' Happily the criticism has been felt and has produced a change at the source of supply, and now we have a greater variety and a heavier demand for our product.

If I might venture a criticism I would suggest that all the old wood cuts and the colored lithographs of bygone days be pronounced taboo. New half tones of Roses made from good photos attract and please, while the old stereotyped plates are anything but enticing, and further the firm using them in its catalog too often propagates or buys obsolete varieties to fit its old plates!

Trading in old varieties which should have gone into the discard is not treating the amateur fairly, especially the beginner in Rose growing; but happily many of your firms are putting out catalogs which it is a joy to handle.

The information possessed by the amateurs and especially the women amateurs of the country respecting the names and suitability of varieties for different purposes is most marked; this has come about through the publication of news items appearing in the press from time to time. "Say it with Flowers" is an awakener not only to the prospective purchaser of flowers, but to the commercial growers as well; it is absolutely necessary for men in the nursery and greenhouse business to be able to talk intelligently and intimately with their customers and prospective buyers.

The Rose test gardens being established in different sections of the country are proving to be a forceful method of bringing the better varieties of Roses to the knowledge of the man or woman who wishes to adorn the home with the finest and best in Roses. These test gardens also indicate poor and unsuitable varieties, thus avoiding much disappointment in selecting varieties.

I understand that you are raising a publicity fund for the spread of information respecting your products; this, with the publicity fund of the S. A. F. and O. H. will surely help both lines of trade, the nurserymen and florists; in fact, the propaganda by the two associations will tend to mutual benefit in furthering trade.

The American Rose Society deserves your hearty support, for with the spread of information regarding the Rose will come a desire for all kinds of ornamentals and evergreens. Every nurseryman should be a member of the American Rose Society; one of your number is its

newly elected president, Robert Pyle, and the annual report of the society is replete with timely articles on the Rose in all its bearings.

ROSE TEST GARDEN

I would especially call attention to the Washington Rose Test Garden. This is fostered and cared for by the Department of Agriculture, and with its great variety of named Roses is an education in itself for any one interested. Here are to be viewed the newer introductions from the leading rosarians of Europe and America; this of itself is a matter of prime importance to those interested. If present plans are carried out, a great garden where Roses, grown in mass backed by the most interesting of the newer shrubs, will be one of the forthcoming features of interest to plantmen.

Another item which should enlist your interest in the operations of the department is the highly interesting scientific work being accomplished by Dr. Van Fleet, under departmental control. He is cross-fertilizing hardy Roses and producing results that are as delightful as surprising, these varieties being disease resisting hardy varieties with showy flowers, will prove most valuable and welcome additions.

Another amateur who is devoting time and money to Rose culture and is accomplishing far-reaching results, is Capt. George C. Thomas, Chestnut Hill, Pa. This gentleman is breeding on special lines, but his one great purpose is to give us perpetual blooming Roses of the Wichuraiana and Rambler types. The work he is doing is most interesting. Out of the six or seven thousand seedlings he is working with there will surely be forthcoming some remarkable types of new Roses. Some of his seedling Roses were the delight of the officers and members of the American Rose Society on the occasion of a recent visit.

PROPAGATION OF ROSES

Nearly all the climbing types of Roses can be propagated from ripened wood made into long cuttings and planted in the open during early Spring.

The placing of ground peat or dried muck at the bottom of the trench where the cuttings are inserted is a practice followed in Europe with good results, a sandy loam being preferable to heavier soil.

Greenhouse growing of wood for propagating purposes is the one method employed extensively by firms in the Middle West; in order to get the wood intended for propagation in suitable condition a close temperature with a humid atmosphere is sought; wood thus grown is placed in shaded frames with a muslin cover some 3 or 4 feet above the glass; about 12 inches of fresh horse manure is used as a base and on this is placed 4 inches of sand. The frame is kept close, the sashes not being raised for some eight or ten days. Cutting thus treated, grown from wood prepared in the foregoing manner, root in about three weeks.

Winter grafting of Roses is practiced by the Rose growers on a large scale, where Winter forcing varieties are demanded. Manettis being used for this purpose. The stocks are potted in 2½ inch pots and when root action takes place they are splice-grafted with scions from green or growing wood, and placed in frames with bottom heat, the temperature ranging from 70 degrees to

75 degrees in closed cases, which are covered with sash or glass. A close moist atmosphere is absolutely essential in order to have them unite; of supreme importance is the introduction of air so as to keep the roots from blackening. Of course, this method is only practical where glass houses are available.

Root grafting on small pieces of roots is a method employed by the nurserymen at Orleans, France; they use hard wood and place the grafts under glasses, shading them with a light wash on the side of bell next to the glass. The grafts are planted some 12 to 20 under each bell; then carefully transplanted when united and in growth.

Stocks for budding purposes are better known by your membership than by myself; their preparation and culture, I take it, is similar to the handling of fruit stocks.

A word as to the kind of stock. Manetti has had the lead in this country with only a moderate quantity of canina being used; while in Europe canina is extensively used, almost to the exclusion of other kinds of stock for budding.

The *Rosa multiflora* of Japan seems to have vitality, is a good producer of roots and is, I think, justly esteemed as one of the most practical and satisfactory stocks on which to bud Roses. A recent visit to two places where this stock is being extensively used would seem to put it in first rank as a stock on which to work Roses. The old Gloire des Rosamenes is being used quite extensively in California with gratifying results; in fact, I have never seen a more beautiful growth than Howard & Smith had in their Rose fields where this stock was used. Own root Roses vs. budded is a controversial field and while I have my own opinion as to their relative merits, I am inclined to think that for most localities the Hybrid Teas and Teas thrive best budded. In the South and in favored localities perhaps own-root Roses are preferable.

VEGETABLE GROWERS' CONVENTION

The Vegetable Growers' Association of America will hold its annual meeting at Detroit, Michigan, September 9 to 12. This organization is composed of many of the leading vegetable growers of the United States and Canada. The attendance usually exceeds five hundred and it is expected that this year there will be a larger number than ever before. Time will be taken to visit points of special interest to the delegates in and around Detroit. There will be special features this year looking to the pleasure and entertainment of the delegates. Vegetable growers who can possibly arrange to attend this meeting will find that it will be a pleasure, profit, and satisfaction to them.

Anyone wishing a copy of the program, which will be issued later, or wishing to secure any other information relative to the convention should write to Samuel W. Severance, Secretary, Louisville, Kentucky, or to C. W. Waid, Chairman of the Convention Committee, East Lansing, Michigan.

CROWN GALL

In the experiments recorded in bulletin 50 of the Iowa State College of Agriculture on the effect of crown gall on apple trees, two of the leading commercial varieties of apples common in Iowa have been employed, namely, Wealthy and Jonathan. The orchard was set in 1912 at Shenandoah, Iowa, on a modified Missouri loess type of soil, using two year old "cut back" trees for planting.

Under the conditions of the experiment described, at the end of five years more of the crown gall infected apple trees were alive than normal trees.

Although the stand for the first four years was better on the crown gall than on the normal block yet the records taken after the severe winter of 1916-17 show that the stand of the Jonathan in the crown gall block was reduced from 96 per cent. to 91 per cent. as compared to a 95 per cent. stand in the normal block.

The experiment confirms the general idea that Wealthy is more susceptible to crown gall than Jonathan. When apparently normal Wealthy and Jonathan trees were set in this orchard 62 per cent of the Wealthy became infected and 13 per cent. of the Jonathan.

In this experiment galled trees did not grow nearly as rapidly as normal trees. Those which were galled when set and later recovered made a greater growth than those that did not recover from the galls.

The data presented show that crown gall greatly retards the growth activities of young apple trees. It is followed by a reduction in the amount of increase in trunk diameter, and in the number of twigs, their length, their thickness and their weight.

The amount of injury is affected by the length of time the tree has been galled and by the location and extent of the injury.

The experiment has not yet covered the activities of trees of bearing age.

It is clear that twig measurement is a much more accurate and valuable index of the effect of crown gall than trunk diameter growth.

Large galls seemed to be more injurious than small ones. Small galls on underground portions of the tree did not seem to injure materially the twig growth.

Fruit spurs develop earlier on the badly galled than on the normal trees.

Galls on the stock and union seemed to be equally harmful.

Galls on the secondary roots were less harmful than those occurring on the union or stock.

Hard galls were less injurious than soft galls.

PERFECTLY SIMPLE

A Boston man who was passing the night at a hotel in a Southern town told the colored porter he wanted to be called early in the morning. The porter replied: "Say, boss, Ah reckon yo' ain't familiar with these heah modern inventions. When yo' wants to be called in de mawnin' all yo' has to do is jest to press de button at de head of yo' bed. Den we comes up an' calls you."—*Boston Transcript*.

LEAF-HOPPERS INJURIOUS TO APPLE TREES

F. H. Lathrop

LEAF-HOPPERS IMPORTANT APPLE PESTS

Serious injury to nursery and orchard plantings in New York has been observed during recent years to result from attacks of three species of insects known as leaf-hoppers. These tiny creatures resemble minute grasshoppers, scarcely more than one-eighth of an inch in length. They spend most of the time on the undersides of the leaves sucking the juices from the plants. When the leaves are disturbed the young leaf-hoppers scurry away, dodging quickly out of sight, while the adults fly swiftly to a place of safety.

The loss of sap which these pests consume is detrimental to the infested trees, but far more damage is done by the curling of the leaves and the destruction of the green substance of the foliage. Incidental winter killing of injured tissues in many cases greatly aggravates the damage done by certain species.

CONTROL

For the protection of foliage, especially of nursery stock or of newly planted apple orchards, chief reliance should be placed on soap and nicotine mixtures of standard strengths. In spraying, the application should be made when the maximum number of nymphs in the younger stages are present, for the adults escape the spray by flying, and are probably resistant to the solution even when they are reached. In case of the apple leaf-hopper it is important to spray before the foliage has been curled, and for this reason it is well to examine nursery and young orchard trees from time to time during the season to determine whether or not nymphs are sufficiently numerous to require treatment. Coarse nozzles and fairly high pressure should be used, applying sufficient material to wet thoroly the undersides of the leaves and, generally speaking, the most satisfactory results can be obtained only by drenching the insects. With nursery stock and young trees, immersion of the growing tips into a receptacle containing a quantity of the spraying material is an effective method of treatment.

In a series of spraying tests in which soap, nicotine and kerosene emulsion were also compared, a high degree of effectiveness was indicated for a spraying mixture composed of nicotine sulphate 1 pint, lump lime 60 pounds, copper sulphate 4 pounds, and water 100 gallons. The copper sulphate was dissolved in four gallons of water, and then the lime was slaked to form a thin paste. These were then mixed together and diluted with water to make the required amount, after which the nicotine sulphate was added. After straining the lime thru a fine metal sieve directly into the tank, during which operation the agitator was kept in action to secure an even distribution of the materials, the suction intake was placed in the tank, when spraying was immediately undertaken. This formula or some modification of it, as may be suggested by future experience, will probably be found to have as its chief field of usefulness the treatment of young non-bearing orchards where it is desired to combat the green aphids as well as leaf-hoppers.

For bearing orchards it is probably not advisable to

make a special application to control these pests. In orchards which receive the routine insecticidal sprays these leaf-hoppers are usually sufficiently controlled during normal seasons to prevent any appreciable reduction of the crop.

One phase of this problem should, however, not be overlooked, and that is the activities of the leaf-hoppers in transmitting fire-blight. Proof of a vital relationship between these agents and the demonstration that the different leaf-hoppers are an essential or an important element in the spread of the disease during midsummer would certainly prove additional incentives for growers to adopt some system of spraying.

PACHYSANDRA TERMINALIS

As a ground cover there is nothing quite equal to the *Pachysandra terminalis*. When used as a groundwork for a choice evergreen planting, it adds so much to it that it is a wonder it is not more widely used. Possibly it is because the supply is always short and the cost comparatively high for a plant that has to be used in large quantities.

The demand is likely to be maintained indefinitely as it is a plant for which there is unlimited use. Its attractive evergreen foliage is always pleasing, and many an unsightly position under trees could be converted into a beauty spot by its use. It has always been a wonder to the writer why the florists have not taken hold of it for their decorative work, especially at Christmas, as it compares favorably with English Ivy, galax, Andromeda, and ground pine. Possibly some enterprising florist will in the future make a killing by exploiting it for that purpose.

The plant does not appear to have any constitutional weakness, propagates readily, grows rapidly and seems to have all those qualities necessary to a plant that is required in large quantities.

One can readily conceive of it being grown by the acre to supply the demand for Christmas greens and interior decoration.

It will grow in any good soil, but does its best in loose soil in open woods, where it gets a little shade and plenty of moisture without being stagnant.

Mrs. Theo Inglefritz desires to thank the National Association of Nurserymen for the sympathy and floral offerings extended from the Convention upon the death of her husband. Mr. Inglefritz died when the Convention was in session.

July 14, 1919

To the Editor:—

Should membership in the American Association of Nurserymen be restricted to those nurserymen who believe that the market development scheme is a profitable one, and are willing to pay for it? The action taken at the Chicago meeting shuts out all others from membership.

MOSS-BACK.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., August 1919

Subscribers to "Nurserymen's Fund for Market Development"

THE SEVENTEEN YEAR LOCUSTS

The much heralded Seventeen
Year Locusts have come and done
their worst.

With the exception of an occa-
sional young orchard, the damage
they have done is comparatively nil, and even in the young
orchards it is doubtful if they have done damage that will
not be completely recovered in one season's growth.

They have come, sang us a song, pruned our forest
trees a little, especially in uncultivated areas, made the
trees look shabby for a while and incidentally gave the
entomologists an opportunity to ring the alarm bell.

It is reported a professor in John Hopkins University
cooked and ate some of them, reporting them excellent.

Who knows, perhaps future generations instead of
looking on their periodical visits with alarm, will wel-
come them as an edible treat.

IS IT GERMANE TO THE SUBJECT?

Now comes a suggested embargo
on hand shaking to prevent the
spread of pernicious germs
among humanity. This will no

doubt be ridiculed into oblivion before it becomes law,
but it is an indication of the extremes to which a
specialist will go when riding his hobby.

Dr. Wilmer Krusen, Director of Public Health of
Philadelphia, who called attention to the danger to health
in practicing the ancient rite of handshaking is no doubt
sincere, and he is merely expressing the opinion of a bac-
teriologist. The public health being his chief considera-
tion, other things are only secondary in importance, in his
mind. There is no doubt that facts and figures could be
produced showing the spread of disease amongst human-
ity is due to clasping unwashed hands with a consequent
terrible mortality to say nothing of the economic loss due
to sickness, etc., etc.

If all our legislators were bacteriologists and M. D.'s
we should naturally have laws to prevent us dying in
spite of our mortal nature.

What has this to do with horticulture?

Nothing at all, except the men who make the laws gov-
erning horticulture are entomologists who think and act
as entomologists to the disadvantage of the ignorant
mortals who wish to move plants or a little soil from one
place to another.

That is how we came to get Quarantine 37.

PROPOSED INCREASE IN RATES FOR PERISHABLE FREIGHT

The Nurseryman's Association has been generally
stirred up by an announcement from Hulse & Allen, of-
ficial reporters to the Interstate Commission over a Per-
ishable Freight investigation, Docket, 10664. Friday,
July 25, I called at the office of Hulse & Allen to inquire
more concerning this investigation.

It appears that a claim for increase charges of Per-
ishable Freight is made and that hearings are being
heard as to the advisability of raising these rates.

The increases are primarily aimed at the fruit shippers,
whose cars require icing enroute. There are, neverthe-
less phases of the investigation that will effect the freight
rates on nursery stock.

There is to be one of these hearings at the Federal
Building, Chicago, at 10 a. m., July 30. I have asked Mr.
A. H. Hill, of Dundee, Illinois and other nurserymen to
attend this hearing to find out what is proposed by Fed-
eral authorities and to give such testimony as they are
competent to give, after which they are to give report of
what has transpired. Secretary Sizemore will in all
probability be in attendance at that hearing also.

There is another hearing to take place in New York
City, September 2. At this Nurserymen shall be in at-
tendance. Also at Atlanta and New Orleans later in the
year.

I have felt that Nurserymen generally would be glad to
know what is thus far being done in this matter and I
might say in addition that the Interstate Commission at
Washington has been appealed to for further information
concerning this investigation.

J. EDWARD MOON,
President, American Association of Nurserymen.

DOES NOT APPROVE OF NEW SYSTEM OF DUES

July 10, 1919.

To the Editor:—

If you were asked to take stock in a corporation, shares
five dollars each, how many shares would you take if the
by-laws of the corporation provided that the stockholder
owning one share would have as much voting power con-
trolling the expenditure of the funds as the stockholder
owning one hundred or two hundred shares?

As I understand it, when the new system of dues re-
cently adopted by the Nurserymen's Association goes into
effect, a member paying ten dollars has as much voice as
the member paying one thousand dollars.

Is that good business and does it look like an attractive
investment?

REACTIONARY.

The Growing and Preparation of Evergreens and Their Uses in Landscape Gardening

Extract from paper read by C. L. Seybold at the Chicago Convention

UNDER this heading, I shall restrict myself to all such conifers as are generally known and grown by nurserymen in the zone from the lower Middle Atlantic States to Canada.

We know, of course, that all conifers prefer a well-drained, loamy soil that is moderately rich, but most of them prefer a light soil that is open and porous.

If the more delicate and half hardy kinds cannot be given such soil, don't plant them; too far North and in exposed positions we often find comparatively hardy kinds unable to winter through, and, on account of the growing season being shorter, the season's growth does not ripen sufficiently to pull them through.

All evergreens that are not carefully burlapped and kept moist during the period of transportation generally arrive in a damaged condition. However, most of the damage is done by careless handling on the part of railroad employees. The trials and tribulations of the nurserymen have been very severe during the past few years; but better times are coming we hope.

The general public seems to be afraid to order evergreens on account of the large percentage of losses. It is true, there are some varieties, especially the Pines, Cedars, some Spruces, Cypress and others that are hard to transplant in larger sizes, but this difficulty can be overcome by giving preference to such stock that has been root-pruned in the nurseries.

I have seen car lots of pines killed by a prolonged trip and careless railroad handling. Upon examination, I found that the resinous turpentine-like sap had almost petrified in the wood which shriveled up and choked them; they became a total loss.

I am sure the sale of evergreens could be doubled by inaugurating an educational campaign in their behalf, for there is nothing growing in Mother Earth that can surpass them in beauty and stateliness.

In speaking of plant value for high class ornamentation, they are in my opinion in a class by themselves. I cannot emphasize too strongly the necessity of frequent transplanting or root pruning of evergreens.

Every kind of tree, either evergreen or deciduous growing transplant better while young than they do when more mature.

There are many kinds of smaller coniferous shrubs and plants that should be grown in greater quantities some of which have become extremely scarce such as:

The upright *Taxus baccata erecta*, *T. fastigiata* or Florence Court Yew, *T. fructer-tutea*, a very handsome golden fruited, *T. canadensis variegata* and the *Taxus baccata variegata*.

There are many Thuyas, Biota and Thuyopsis of exceptional merit. Yuccas, Japan Holly Mahonais, and American-grown holly work in well to the front lines of coniferous borders. Hollies should be transplanted in early

fall with a ball of earth. They will make fresh roots before winter and will start out good and strong in spring with new fibrous roots.

The Junipers show many habits, prostrate, upright, globe, dwarf compact, white, golden and variegated. They are extensively used in rock and Japan gardens and in well-drained coniferous borders with the Alpine Forest Heath with evergreen perennials and grasses to fill in.

As to the proper period of planting, I have, under certain conditions and very frequently advocated early fall planting, a semi-dormant period with excellent results, and where new growth has well ripened I have given early fall planting the preference.

In case of extreme dryness, a thorough watering or puddling,—this should not be overlooked. This will start the plant at once into renewed root action and will become well-established before winter sets in. When the ground is slightly frozen, a mulch of litter, leaf mould, evergreen bough, or straw wrappings will protect your fine specimens against dry winds and severe cold.

Heavy irregular coniferous borders are often planted very dense for mutual protection, and for immediate effect, with the object in view of thinning them out later. Unless such work is done judiciously by a careful planter with the creative idea for permanent effect, the job may turn out a failure. Experienced nurserymen and landscapers make it a point to keep on hand cross-section sketches of previous successful plantings.

These planting sketches can be used over and over again with some slight alterations to suit certain conditions. They should show an artistic intermingling of the pyramidal, pendulous, globe and prostrated forms, as well as the glaucous bronze, golden and variegated varieties. The colors must be judiciously balanced with green tints greatly predominating.

The smaller city or suburban home grounds may be ornamented in the same manner as the larger places, on a smaller scale by using the many kinds of dwarf and other coniferous shrubs and plants. It is always of interest to nurserymen to know the evergreens that thrive best in city yards.

Buxus sempervirens used in bordering beds is quite hardy when thoroughly established, but it must be protected from wind and sun for two winter seasons after planting.

Evergreen privets *Ligustrum lucidum* and *L. Japonicum* thrive well under city conditions. These two, however, are not as hardy as the Box and Euonymus. The Am. Holly (*Ilex opaca*) is more dependable than the English Holly. When transplanting these, they should be severely pruned; this is generally overlooked.

Rhododendron beds bordered with *Pieris alba floribunda*, known also as *Andromeda floribunda* should be used and grown more extensively. This is a valuable

plant for bordering purposes. Another variety is the *P. japonica*.

The hardy dwarf Azalias with their deep green foliage and bright flowers. The Kalmias are also good border plants for Rhododendron and small evergreen beds.

The planting for wind breaks should be advocated more than it is. In Colonial times it received more attention than it does now. *Picea alba*, *P. excelsa*, Norway Spruce, Hemlock should be used more for this purpose; even Cypress, Cedars and Siberian Arbor Vites lend themselves for wind-breaks, screens and hedges.

It is encouraging to note that our people are constantly giving more careful attention to the proper surroundings of their homes. They realize the value of improved modern planting as against the old time formal designs, and landscape gardening is fast taking its place as an advanced art.

The old Colonial garden parks of the North and South have a claim to charm and sylvan beauty. There are many stately old homes with wonderful specimen evergreens, cypress, cedars, magnolia, elms, oaks, black walnut. Great specimen Box showing good taste in planting and great care in preserving them.

Long stretches of country roads or connecting avenues between towns and cities that are usually planted in deciduous trees, should have evergreen trees, such as spruce, pines, piceas or Cypress planted between them, one deciduous and one evergreen alternately.

The idea of Memorial tree planting is one of the most fitting and inspiring that has yet been conceived by a patriotic people. Sentimentally and from the standpoint of practicability what finer monuments could there be in commemoration of the sacrifice of those who gave the last full measure of devotion for their country.

Restrictive legislation has harmed the nursery business to some extent. It is hoped that it will soon be removed. The Government should do everything to encourage Horticulture in every branch.

The planting of window and balcony boxes containing small coniferous plants should become more general, but care should be taken to only use the hardiest kinds. Small boxes containing dwarf conifers and hardy ivies could be designed so as to enable the owner to remove them from the open to indoors on the order of the Japanese style. Thousands of such boxes can be sold by enterprising firms. It will help to popularize coniferous plants.

HORTICULTURAL EDUCATION

Professor Woods, in his address at the Convention, called attention to the necessity of education to advance the interests of nurserymen. Theo. Borst of the Little Forest Tree Farms was active in advocating a university course for nurserymen, saying it was essential if the nurserymen were ever going to raise their profession to the plane where it belongs.

There are really three grades of education necessary, a university course for the men who are going to represent us in the government, as nothing less would have

sufficient standing with university graduates in other professions.

Another grade of education would be college men who know the commercial value of the results of labor. There is a great weakness in the present method of educating the horticulturist. The young man goes to the grammar school, from thence to the High school, which lands him at 17 or 18 years of age. He then takes a course at an agricultural college, where they are supposed to be taught how to work, but it is in such a way they do not acquire the one essential necessity, and that is to know the commercial value of the results of labor. It is for this reason that the graduate of the agricultural college is rarely a success in commercial nurseries or gardens, and he invariably gravitates to private estates, institutions, parks or the government. The process should be reversed, and a young man should serve three or four years on a nursery before taking his college course. If this method were followed there would be many more college men in the nursery business.

Another grade of education and perhaps one that is even more essential than the two mentioned above, is that of the skilled practitioner or workman, and of course there is only one school or college from which they can graduate, and that is the nursery or garden. Book learning is only of secondary importance. The more they have of it of course, the better, up to a certain point, but where it begins to detract from their efficiency and knowledge of actual work and plants, they are better without it.

While we all ought to earnestly work for the establishment of a chair of horticulture in our universities, and try and see that our college men learn to know the commercial value of the results of labor to a greater degree than they do when they graduate at present, it is really up to the nurseries and horticultural establishments themselves to find some way to educate skilled workmen in their profession.

Judging by the following from the Horticultural Trade Journal the same need is felt in Europe.

"Another matter that demands the serious attention of the Trade is the reinforcement of the ranks of really skilled and clever craftsmen which as in every other sphere, have been sadly drained whilst the normal influx of beginners has been arrested. Depleted stocks of trees, and plants cannot be replenished without skilled propagators, and the selection and improvement of seed-stocks demands the work of carefully trained hands. I venture the opinion that the revival of the apprenticeship system in nurseries and gardens would prove to be of far more real value than the development of Training Colleges and Institutes of Scientific Horticulture and if the proprietors of nurseries will adopt the principle of giving their employees a tangible interest in the development and prosperity of their business the results will be greater and more beneficial than any form of Trade Unionism for garden workers can be."

Charles Sizemore, Secretary and Treasurer of the National Association reports that the Market Development funds are coming in very nicely and everything looks good for a very prosperous year.

QUARANTINE 37

Flushing, N. Y., July 17, 1919.

Editor National Nurseryman:—

Dear Sir:

I was much disappointed in the report of the proceedings of the American Association of Nurserymen held in Chicago in June and published in the July issue of your paper.

Therein there was no expression of the Association concerning the Federal Quarantine Law known as Quarantine 37. I had counted upon the opposition of this quarantine coming into the open and registering their objection thereto, but apparently no member dared even call his soul his own to the extent at any rate of proclaiming his unbiased judgment. Or are all the members of the Association affected with the money itch and, believing themselves benefited, kept silence. It is incredible they did so from conviction; the ethics of the question are all on the other side.

It is wholly unreasonable to expect the Horticulturists abroad to feel kindly to America when she, almost without warning, nearly ruins them. I inquire where the doctrine of Christian or any other ethics appears in such selfishness and inquire too if this is the spirit of true democracy that is to make the world a safe habitation for man.

The entomologists and men of science generally must do something to justify them before the people and to make it appear how necessary they are in the machinery of government. Many of them are influenced unconsciously to take the stand they do and, without being aware of it, become instruments for the suppression of the real interests of mankind. Nature in its workings makes few mistakes and perhaps were we possessed of infinite knowledge makes none at all. If an insect pest appears it will shortly be preyed upon by some parasitic or other enemy and a balance re-established. Witness the San Jose scale and Oyster Shell scale. Natural enemies rather than man's agency control both and indeed all such pests.

There will be a rising and ebbing tide in their appearance. The Oyster Shell scale which, in recent years, has been most menacing is today in this locality very greatly diminished and its extinction even is promised by natural agencies. It has been in evidence here in the East for more than fifty years and we no longer hear much about it. It is the new pests that the scientists herald to the world as the destroyer of man's ease and even his existence. The rigid enforcement of Quarantine 37 will limit greatly the ornamental material so much used in recent years for the adornment of modest and elaborate homes and will limit greatly man's freedom. It is more than a tax upon consumption, it is in many things an absolute prohibition prompted by rather shady and certainly selfish reasons. If we would pay more attention to conservation of natural resources and less to interference with the commerce of the world we would do something for the uplifting of society and the regeneration of man.

Very truly yours,

THEO. FOULK.

ENGLISH IVY

There is always a good demand for English Ivy. The florists use it in great quantities as well as the landscape gardeners, so there is rarely an over-production. In addition to this it is very readily propagated, as it roots easily from every joint. It is one of those things that the nurseryman need never fear having an over supply of, and if he does a general business it is almost essential that he carry a stock.

The one objection to it from a commercial viewpoint is its liability to winter kill. While it is considered hardy as far north as New York, it suffers very much in the winter especially in exposed places and southern exposures. It seems to thrive better in sheltered positions where it does not get too much sun, especially in the winter.

This plant has not been used as much as it should as a cover plant. To-day, the writer passed a very well kept place where there were quite a number of large trees on the open lawn, where it would have been practically impossible to have kept a good stand of grass under them. The ground was completely covered with English Ivy that was well looked after, the result being very pleasing. For this purpose alone, covering the ground under trees and shaded positions where grass will not grow, it is invaluable and should be used a great deal more than it is. Such positions occur in city yards especially, due to the buildings and other conditions that are un congenial for grass. When properly planted with English Ivy, a very pleasing effect can be secured both summer and winter.

There are quite a number of forms. The common one, which seems to be very generally distributed, has rather a large leaf and a loose growth. This, however, is not a very good type for clinging to walls, and it is sometimes amusing to see large bunches at the base of walls, where it was planted with the evident intention of having it climb and cover them. One of the main reasons the English Ivy does not climb is due to improper planting or starting. A very common practice is to set out plants from pots, and then fasten the vines to the wall. This is not at all a successful method to start it clinging. A much better plan is to peg the vines down along the base of the wall and let them root at each joint. The new shoots, coming right from the ground, adhere much more easily and cling to the wall from the ground up, whereas if loose vines are nailed to the wall, there is always a loose portion constantly in motion by the wind, which prevents it from adhering to the wall.

Some of the smaller leaved types seem to cling much more readily than larger ones, so care should be used in securing the proper kind of stock for the different purposes.

SPEAKING OF FATHER

MOTHER—"No, Ethel, a visit to the seashore is out of the question this year. Your father can't afford it."

"Mother, has it ever occurred to you that father could work harder if he tried?"—*Life*.

THE NATIONAL ASSOCIATION

The splendid work performed by Councillor Curtis Nye Smith for the nurserymen of America, entitles him to their lasting gratitude. In 1918, with the help of ex-President Mayhew, he kept embargoes from nursery stock, thus permitting the nurserymen to ship their products at a time when almost every other commodity was restricted.

He also kept the nurserymen posted in reference to adverse legislation and guarded their interests in many ways.

With the embargo troubles cleared away, the war over, and with Quarantine No. 37 enforced, there seems to be less need for Mr. Smith's services, hence the executive committee of the National Association released him.

The Credit and Collection Bureau which Mr. Smith was so successful in conducting, will be provided for as soon as arrangements can be completed.

The unexpected action of the nurserymen in taking over the Market Development movement, as a department of the National Association has certainly placed a responsibility upon the Officers of the Association. The management of this department or bureau is going to require a tremendous lot of executive and detail work, and until the work is organized, the officers of the National Association will naturally feel their responsibility.

The Convention in Chicago also went on record as seeking aid of the Federal Government in securing crop reports on nursery stock, so that nurserymen may more intelligently propagate and plant.

Legislative matters in general have to be looked after, and these it was felt, could be seen to by an executive secretary, capable of managing the affairs of the Association and the Market Development movement, as well as developing new activities of the Association and merging the activities of kindred Associations, thus centralizing as far as possible the nursery interests of America.

It became known in Chicago that Mr. John Watson had severed his connection with the Princeton Nurseries. The executive committee sought him for the position of executive secretary, to give his entire time to the affairs of the National Association. It was thought that he could watch horticultural legislation in Washington, and when necessary appear before the right authorities there and do much to bring about a better feeling between the nurserymen and the Department of Agriculture, which it must be admitted, as a result of Quarantine No. 37, became somewhat strained.

The Market Development movement, from its inception, has had Mr. Watson's support and help in its management at every turn. It was thought that there is not another man in the entire membership so well acquainted with the nurserymen of America, their requirements and personalities. This influenced the executive committee to request Mr. Watson to consider the proposition of becoming the Association's executive secretary.

Members of the Association would think themselves fortunate, indeed, if they could get so prominent a nurseryman and one so eminently fitted, to look after their interests in this capacity.

While waiting for the decision of Mr. Watson, the work

of the organization has been largely suspended, but it is earnestly hoped he will come to a decision and accept the offer at a very early date.

If he accepts, the duties now falling upon the legislative committee, the President and other officers of the Association, will in a large degree be delegated to the executive secretary. Should Mr. Watson decline, other arrangements will have to be made for the Credit and Collection Bureau, legislative matters and other problems of the Association.

The officers of the Association expect, before our next issue, to have everything definitely settled, so that an announcement can be made in the National Nurseryman, as to what arrangements have been made for carrying on the work of the Association. In the meantime, Mr. Charles Sizemore, Louisiana, Mo., will attend to the secretarial affairs as he did a year ago. It is intended to retain Mr. Sizemore to carry on the Traffic Bureau, which he so successfully handled for us a year ago, hence the engagement of Mr. Watson would not in any way affect Mr. Sizemore's position, except that some of the duties he is now performing would be taken over by the executive secretary.

FUTURE STOCK

American Nurserymen have been depending upon the imports from the old country for many choice ornamental plants that they will now have to raise themselves. Things that propagate easily will no doubt soon be in ample supply, even though large quantities used to be imported from Europe before Quarantine 37 went into effect.

The choicest plants, however, as a rule are more difficult to propagate and take longer to grow. With many things it is even necessary first to establish stool plants or stock grounds on the nurseries before propagating can be commenced with any degree of efficiency.

Take plants like the Chinese Magnolias *Magnolia conspicua*, *Soulangiana*, *Halleana*, and other kind that were originally imported in large quantities. They have to be propagated by layering, and with some kinds it takes two years to root before they can be taken off the mother plant.

Where budding or grafting is necessary the stocks must be raised first, which takes several years.

Unless some Company with a large aggregation of capital organizes a large propagating nursery to supply the growers with young stock, it will be necessary for each nursery to a greater or less extent, to go into the propagating business. The first essential is to establish a stock ground where the stool plants can be placed for layering, inarching, or to supply wood for budding or grafting, or whatever process is necessary to increase the particular kind desired.

The plot of ground reserved for this purpose can be made very profitable, and should really be a part of the equipment of every nursery that carries a line of ornamentals. It should be a piece of ground, sheltered, and where it will not interfere with economic workings of the rest of the nursery, and of course if water is available it would be an insurance against failure, although it is not absolutely essential. Some nurserymen have an idea

they can combine stock and show grounds. This is rarely satisfactory, because the stock ground is more of a factory than a showroom and is seldom in condition to take visitors through, or a place where plants can be shown off to the best advantage. Set the stool plants in rows, wide enough apart so they can be cultivated and kept clean as economically as possible. In other words, aim to make it the workshop of the nursery.

BABY RAMBLERS

The annual meeting of the Baby Ramblers was held at the Hotel Sherman in Chicago on Wednesday, June 25th, and the following officers were elected for the ensuing year: B. J. Manahan, President, and Hort Bowden, secretary.

The following members were elected to the order this year: C. Stuart Perkins, Newark, N. Y., Wm. F. Masten, Newark, N. Y., F. Burnett Kelley, Princeton, N. J., James West, Perry, Ohio, Clarence Lear, West Chester, Penna., Wm. Flemer Foulk, Flushing, N. Y., Lewis Bryant, Princeton, Ills., and Frank Fields of Shenandoah, Iowa.

If you don't think they are there, you should have heard the noise and seen them eat at the Green Mill.

HORT BOWDEN, *Secretary*.

ONE POINT OF VIEW

An old and dusky daughter of the South, to whom things present themselves in terms of her profession, describes a Red Cross parade in which the canteeners and surgical dressings workers marched in all their white glory:

"Lawsee, Miss Anna, it cert'nly was a gran' spectacle! Neveh in all ma life did I see so much washin' at one time!"

WEEDS

It is interesting to note that two plants, which are much grown in gardens in Australia, are troublesome weeds in their native habitat. *Aster ericoides*, which is here grown as Easter Daisy, or Michelmas Daisy, and which is known in America as the Frost Flower, is a serious weed pest in the State of Kentucky, where it is a native plant. There it is a common weed along the roadsides and in pastures. Here it is one of our most decorative garden herbaceous plants for flowering at Easter.

The other plant is *Tecoma radicans*. This is also native to Kentucky, where it is known as the Trumpet Flower. In Australia it is a popular climber, and its handsome orange red trumpet-shaped flowers are well known. It is also used as a stock for rootgrafting other *Tecomas* on to. It is recorded for Kentucky that there it becomes a common and persistent weed. After all, a weed is merely a plant in its wrong place, although such plants frequently become so much at home, that they grow so abundantly as to take the place of other and more useful plants.—*The Australasian International Nurseryman*.

AMERICAN HORTICULTURE

Every true American horticulturist resents adverse criticism when comparing his own country with those of the Old World, even while feeling that there is some ground for the general belief that many parts of the old country are far ahead of the United States in horticultural practice.

If we do not appear to measure up to certain accepted standards, and feel mortified if our gardens are not so fine, our flower shows not so successful, our botanical gardens not so well kept up, our nurseries incomplete in assortment, and our seed houses limited in variety of stock, there is a reason for it. Attempts at comparison in most cases are extremely unfair, and even silly.

Without detracting in the least from the high standard of European horticulture, the United States has not and is not developing along the same lines. This country is so vast and has such diversified climate, that it is silly to speak of it as a unit. To fully realize the extent from a horticultural viewpoint it is only necessary to study the catalogues of a nursery located in Maine or Montana, and compare it with the catalogue of a nursery in Florida or southern California. It is just as reasonable to compare a garden in California with one in New York State, as it is to compare a garden in England with one in Pennsylvania or Virginia. Each may be perfect in its own particular way, but yet entirely dissimilar, and it would be unfair to say that one was better than the other.

Those portions of the United States which are now becoming well populated are developing a horticulture peculiarly their own. Of course, the growth is slow. It is only a few generations since the Indians and buffaloes were roaming over many of these localities, and it is hardly to be expected that until the utilities of living are thoroughly developed, the finer things do not receive very much attention.

To those more familiar with the progress that is being made in horticulture in this country, it is really astounding. Perhaps the branch that is farthest advanced is that of growing cut flowers under glass for the florist trade, which has been brought to a degree of proficiency and success in northern and eastern United States that is unequalled.

Another phase of horticulture in the United States that is worthy of note is orcharding. It would be difficult to find anywhere in the world anything superior to it in this line, and it is being developed along lines that are peculiarly American.

The private estate is peculiarly a European institution, and the gardens reach perfection in that country. They cannot develop along the same lines in America, and perhaps this is the reason many think horticulture is so far behind, as it is the private estates of the European countries where their gardens have been developed to the nth degree.

In the United States suburban development adjacent to large cities is making rapid strides, and it is a very dissatisfied critic who does not recognize the remarkable progress everywhere evidenced in the suburbs of large American cities.

We are too fond of complaining and thinking something possessed of the other fellow is much better than any-

thing we have. It does not hurt at all to occasionally take stock and appreciate what we possess ourselves and mark the progress we are making.

CAPRI WASPS AND THE FIG

Richard Spillane writing in the Philadelphia Public Ledger says:

For many years America depended to a large degree on Near Asia for figs. There were no figs to compare with the figs of Smyrna. They dried readily and could be shipped the world over.

Here in America we raised figs, big luscious figs. Any one who has lived along the gulf coast, and especially in South Texas, knows the fig. It was so plentiful that in season it was hawked about the streets of cities like Galveston, Houston and San Antonio, and sold by the bucketful for ten cents. Most people had fig trees in their front or back yards.

But the figs had to be eaten promptly upon ripening or made into preserves or they would not "keep." Innumerable efforts were made at drying, but without success. In Texas the belief was that there was too much moisture in the coast-country air. In Georgia, Alabama and Mississippi, some other explanation was advanced. In California where it was as dry as a bone, all sorts of efforts at drying were attempted, and all sorts of theories advanced as to why they didn't give satisfactory results, and all these theories were wrong.

Some wise old boy in Georgia who had made a life study of figs came to the conclusion that there was some discoverable reason why the fig of Smyrna dried almost naturally and that the fig of America did not; why the fig of Smyrna would stand transportation around the world and the fig of America would not stand transportation 1000 miles; why the fig of America, which in quality was better than the fig of Smyrna, was of little value and the fig of Smyrna brought big profit.

He went to Asia. He discovered that in Smyrna there was a peculiar custom in fig growing. Once a year the fruit raiser went into the hills and brought down branches of the wild fig trees and mixed them with his cultivated trees. Why he did this he could not explain except that it had been a custom for ages, and custom is strong in old, old countries.

The man from Georgia brought back some of the wild fig boughs and mixed them with his fig trees. He was greatly gratified a few years later to discover that his fruit dried readily. He had discovered on the wild fig boughs a queer insect, a cross between the fly and the wasp. This insect lived in the fig tree.

After two years of partial success in drying his figs the Georgia man had a season of failure. His wasp-flies had disappeared, died off, perhaps. Not until he sent to Asia for more boughs of the wild fig trees was he able to dry figs without great difficulty.

Out of the man's experimenting there has developed such progress in fig drying as America has to her credit. There was sound sense back of the custom of the ancients in bringing down from the hills the boughs of the wild fig, for the fly or wasp carried certain pollen to or fertil-

ized the cultivated fig so it did not spoil, as does the fig that is not "stung" by the wasp.

America has not acquired the skill in drying figs that is possessed by the people of the Levant, but it will "get there." Meanwhile the fig crop grows in value year by year and the fig wasp comes more and more in demand. That explains the short story from California. Incidentally it makes persons appreciate that the pests of life may perform useful functions of which we know little.

Who would have supposed that there was great economic worth in the sting of a wasp? Not all wasps, maybe, but surely in that of the fig wasp. One of these days we may discover some useful if not lovable qualification in the mosquito. You never can tell.

SOUTHERN NURSERYMEN'S ASSOCIATION

The Southern Nurserymen will hold their annual meeting on August 20th and 21st at the Piedmont Hotel, Atlanta, Georgia.

The following are the officers:

H. C. Caldwell, Atlanta, Ga., President.

S. W. Crowell, Roseacres, Miss., Vice President.

O. Joe Howard, Pomona, N. C., Secretary and Treas.

WAR ORPHANS OF FRANCE DYING FROM MALNUTRITION AND SHOCK

The children of France have not yet emerged from the shadow of the war. With peace assured, and a happier future opening before them, it becomes increasingly evident that the child life of France has suffered a shock from which it is difficult to rally; while the birth rate has dropped to 8 to each 1,000 population.

The Fatherless Children of France, an American organization co-operating with a similar one in Paris of which Marshal Joffre is the head, reports that of the children receiving American aid to the extent of 10 cents a day under its plan of securing American godmothers for the little French war waifs, its records show an average of 700 children's deaths per month since the armistice. The help of the American godmothers came too late to save these undernourished nerve-shocked little ones.

Mrs. Walter S. Brewster of Chicago, vice-chairman of the Fatherless Children of France, has been appointed chairman of a campaign to secure American aid for the 60,000 little war orphans whose names were on the lists of the organization as "unadopted" before the signing of the armistice. Ten cents will care for a child for an entire day; \$3.00 for a month; while for \$36.50 a year the donor may select a child from the lists at the organization's headquarters and be placed in correspondence with it. To adopt a child or make a donation write for information to Mrs. Walter S. Brewster, Room 634, 410 S. Michigan Avenue, Chicago.

Are You Getting Your Share of the Cream?

There's Enough to go 'Round, But You Must Help do the Skimming!

What they did out there at Chicago, put everybody on board the Market Development wagon.

As you know, the American Association of Nurserymen, in full convention assembled, voted almost unanimously to take over the Organization for Market Development, and the activities of the Nurserymen's National Service Bureau. The Service Bureau is now part and parcel of the National Association.

Every member of the American Association is therefore entitled to all the advantages that there are to be had now, or will be available in the future, from the nation-wide publicity and advertising campaigns which the Nurserymen's National Service Bureau has under way.

But this isn't the kind of a proposition where you just sit still, and have all the dividends handed to you on a golden platter.

What you get out of the work of the National Service Bureau, will depend very largely upon what you do yourself—YOU, as an individual—to take advantage of the advantages offered you by the Service Bureau.

And the first and most immediate result-producing action you can take, is to make sure that the best newspapers in the territory in which you sell, are using the business-building SYNDICATED ARTICLES which the Service Bureau is supplying free to newspapers.

Are the newspapers in YOUR TERRITORY, using these articles?

If not, why not?

We plan to supply at least one thousand newspapers with these articles for this fall and next spring and summer. That is about three papers to every member of the American Association.

But to be sure that these articles reach the papers where they will do the most good, we must have the co-operation of you men who are selling nursery stock.

The success we have had in getting these articles widely distributed has depended largely on the fact that we have supplied them to only one paper in each locality. Knowing they could run them as exclusive features, big papers that do not ordinarily touch "syndicated" matter, have used every article we have sent out and asked for more.

Now, here is where you can help, help us, but help yourself more.

Send in, TODAY, a list of the five newspapers that you would like to have use these articles.

Send more if you want to; but send at least five. Give the names of the editors if possible. (Send the list to F. F. Rockwell, 220 West 42nd St., New York). Don't delay in this important matter. Remember, our present budget provides for 1000 papers. In the nature of the case, it's got to be "first come, first served." Of course we will aim to cover the territory as evenly as possible. But don't take any chance on having the papers you particularly want left out; do it today.

The Other Side of the Coin

Of course there are other important things that are coming along, in line with the programme which was discussed at Chicago, but the big thing right now is to get this newspaper campaign in full swing.

That is one of the big things. There is another.

Under the new arrangement, by which the Association takes over the Market Development campaign, every member of the National Association will be paying his share of the expense of the Market Development campaign—after the first of next June. But between now and the first of next June, all will be sharing the advantages of the Market Development work alike.

Therefore it does not need "a Daniel come to judgment" to point out that the only just plan is for all to help pay for the campaign this year.

A good many new subscriptions to the Market Development fund have come in since the Convention; and several others have been promised. But there are still a good many who have not yet cooperated to the extent of "saying it with a check." It was the sense of the Convention at Chicago, as shown by the resolution passed there in regard to this matter, that there is at least a moral obligation for all those who may still be riding free to come in with a year's subscription for Market Development work. If you know anyone who has not yet come in with the rest of the bunch, it's good business for you to make him see that it's good business for him to do his bit.

Keep in mind this fact: The bigger the total fund is for this year; the better the showing that can be made for each individual dollar put in. For \$50,000 we can do a great deal more than twice as much as we can for \$25,000.

Still Looking for a Slogan

The Market Development Committee is still looking for the winner of that \$100 for an acceptable "slogan" for the Market Development campaign.

Following the announcement of the offering of the prize at Chicago, almost every mail has brought in at least one suggestion,—some with return-addressed stamped envelope, for the \$100!—but the Committee doesn't feel that anyone yet has that prize sewed up. The contest will close September first.

So you men with good advertising ideas, get busy!

Send your slogan in to F. F. Rockwell, Nurserymen's National Service Bureau, 220 West 42nd St., New York.

COMPONENTS

Life has its little troubles,
And they never all relax.
The drink is mostly bubbles
And the price is mostly tax.

—Washington Star

SOUTHERN NURSERYMEN'S ASSOCIATION

The meeting of the Southern Nurserymen's Association, will be held at Piedmont Hotel, Atlanta, Georgia, August 20th and 21st.

It will convene 10 o'clock Wednesday morning, August 20th. President H. C. Caldwell, of Atlanta; Vice-president, S. W. Crowell, Roseacres, Miss., and Secretary and Treasurer, O. Joe Howard, Pomona, N. C.

Address of welcome will be made by James L. Key, Mayor of Atlanta, Response by Col. George W. Poague, Graysville, Tenn.

Speeches by biggest and brainiest nurserymen from several states, of which the following is a partial list.

Lloyd Stark, Louisiana, Mo., J. R. Mayhew, Waxahachie, Tex., Sigmund Tarnok, Augusta, Ga., O. W. Fraser, Birmingham, Ala., S. W. Crowell, Roseacres, Miss. E. W. Chatten, Winchester, Tenn., Mr. Hume, Glen Saint Mary, Fla., Harry Nicholson, Winchester, Tenn., Henry B. Chase, Ala., and others, also Entomologists A. C. Lewis, of Georgia, and G. C. Starcher, of Alabama, C. A. Reed, Department of Agriculture, Washington, D. C., Nut Culturist.

The "Plant Quarantine" and "Market Development Fund" and other important issues will come for thorough discussion and action. Banquet for members and guests at The Ansley Hotel on Wednesday evening.

Splendid prospects for a big meeting and good time.

FOR LEAF-SPOT ON SOUR CHERRIES

For the control of leaf-spot, sour cherries should be sprayed with lime-sulphur solution diluted at the rate of 1½ gallons to 50 gallons of water or with Bordeaux mixture containing 3 pounds of bluestone (copper sulphate) and 4 pounds of lime to each 50 gallons of water—

- (1) As soon as the petals have fallen.
- (2) About three weeks later.
- (3) Directly after the fruit is picked.

Arsenate of lead at the rate of 1 pound of powder or 2 pounds of paste to 50 gallons of spray may be added for the control of insect pests.

Sweet cherries should receive the same treatment as the sour ones, except that lime-sulphur solution diluted at the rate of 1 gallon to 50 gallons of water should be the fungicide used. Bordeaux mixture should never be used on sweet cherries, because of the risk of severe injury.

Often, especially in the South, the disease may be controlled by spraying three weeks after the petals have fallen and directly after the fruit has been picked, or sometimes only after the fruit has been picked, but the omission of any one of these three applications is always attended with risk.

TWO USEFUL SHRUBS

Two plants useful for covering the margins of drives and the borders of shrubberies, *Rhus canadensis (aromatica)* and the Yellow Root (*Xanthorrhiza apiifolia*) are covered with flowers. Those of the former are small, pale yellow, arranged in compact heads, and appear before or with the unfolding of the leaves composed of three leaflets; those of the Yellow Root are purple in long drooping, terminal racemes. The flowers of these two eastern American plants are attractive, but their great horticultural value is in their habit of growth. The height of the *Rhus* is from two to four feet, with spreading branches, the lowest flat on the ground, and with an irregular top. In the autumn the leaves turn bright scarlet. For road borders and to plant when it is desirable to make a connection between larger shrubs and the ground no other plant which has been tried here has proved so successful. The Yellow Root is a dwarf shrub which soon spreads over a wide border and forms with its erect stems and divided leaves an excellent ground cover. Unfortunately it has failed to grow well in those parts of the country where the soil is strongly impregnated with lime.

HE SHOT LOW

A party of gentlemen at a hotel were telling stories one night recently of famous shots and how many quail, partridges, ducks and other birds had been killed at a single discharge. After listening to what seemed a wilful exaggeration by different narrators, a stranger who was present volunteered his experience of his only use of the fatal double-barreled gun as follows:

"I went into the field one day to try gunning. The only game discovered was an immense flock of crows. I should say there were 10,000 in the flock. Slowly I crawled up to them, and when not more than four rods away the crows rose in a solid mass. I fired both barrels, and how many do you think I killed?"

Different guesses were made by the party, ranging from 20 to 100.

"Not one," said the stranger, "but I went out with my brother to look for the results and picked up four bushels of legs. I had shot a little under."—*Du Pont Magazine*.

CAUSE ENOUGH

He was very black and in his khaki he looked like coffee and chocolate ice cream. After eating a hearty meal in the American Red Cross canteen he sat down with a book near the counter. The kind-hearted directress looked once or twice in his direction and was surprised to see big tears rolling down his cheeks.

"Why, now, this will never do," she said kindly. "Is there anything I can do to help you?"

He dug his knuckles into his eyes and replied:

"I sholy am ashamed to make a baby outen myself, ma'am. This yer book done make me so homesick."

She picked up the book he had been reading. It was the canteen cook book, and it was opened at the section on "How to Fry Chicken."—From *Saturday Evening Post*.

AMERICAN ASSOCIATION OF NURSERYMEN

President—J. Edward Moon, Morrisville, Pa.

Vice-President—Lloyd Stark, Louisiana, Mo.

Treasurer—J. W. Hill, Des Moines, Iowa.

Secretary for the Association—Chas. M. Sizemore, Louisiana, Mo.

Executive Committee—C. R. Burr, Manchester, Conn.; C. C. Mayhew, Sherman, Tex.; J. B. Pilkington, Portland, Oregon; J. Edward Moon, Morrisville, Pa.; E. S. Welch, Shenandoah, Iowa.

LIST OF COMMITTEES AMERICAN ASSOCIATION OF NURSERYMEN 1918-19

Finance—E. S. Welch, Chairman, Shenandoah, Ia.; E. W. Chatten, Winchester, Tenn.; T. B. West, Perry, Ohio.

Program—E. M. Sherman, Chairman, Charles City, Ia.; J. W. Hill, Des Moines, Ia.; Orlando Harrison, Berlin, Md.

Arrangements & Exhibits—Alvin E. Nelson, Chairman, Chicago, Ill.; F. R. Von Windigger, Clayton, Mo.; E. S. Welch, Shenandoah, Ia.

Hail Insurance—F. A. Weber, Chairman, Nursery, Mo.; E. P. Bernardin, Parsons, Kans.; H. D. Simpson, Vincennes, Ind.

Press & Publicity—Ralph T. Olcott, Chairman, Rochester, N. Y.; Jno. S. Kerr, Sherman, Texas; Chas. Sizemore, Louisiana, Mo.

Statistical—Henry B. Chase, Chairman, Chase, Ala.; Wm. Pitkin, Rochester, N. Y.; E. S. Welch, Shenandoah, Ia.; M. R. Cashman, Owatonna, Minn.

Landscape Architects—Thos. B. Meehan, Chairman, Dresher, Pa.; J. Edward Moon, Morrisville, Pa.; Wm. Flemmer, Springfield, N. J.

Nomenclature—J. Horace McFarland, Chairman, Harrisburg, Pa.; L. A. Berckmans, Augusta, Ga.; Chas. J. Malloy, Rochester, N. Y.

Standardization—Harlan P. Kelsey, Chairman, Salem, Mass.; F. L. Atkins, Rutherford, N. J.; Henry Hicks, Westbury, L. I.

Distribution & Directory—M. R. Cashman, Chairman, Owatonna, Minn.; James Pitkin, Newark, N. Y.; Chas. H. Perkins, Newark, N. Y.

French Relief—F. L. Atkins, Chairman, Rutherford, N. J.; W. C. Reed, Vincennes, Ind.; Paul C. Stark, Louisiana, Mo.

Annual Report—Chas. Sizemore, Chairman, Louisiana, Mo.; Paul C. Stark, Louisiana, Mo.; F. R. Von Windigger, Clayton, Mo.

Vigilance—Paul C. Stark, Chairman, Louisiana, Mo.; Robert Pyle, West Grove, Pa.; Henry B. Chase, Chase, Ala.

Arbitration—Jno. S. Kerr, Chairman, Sherman, Texas; G. A. Marshall, Arlington, Nebr.; J. M. Pitkin, Newark, N. Y.; Jno. Dayton, Painesville, Ohio; T. W. Stark, Louisiana, Mo.

Legislation—Orlando Harrison, Chairman, Berlin, Md.; Jno. Dayton, Painesville, Ohio; Robert C. Chase, Chase, Ala.; J. M. Pitkin, Newark, N. Y.; C. C. Mayhew, Sherman, Texas; F. H. Stannard, Ottawa, Kans.; Thos. B. Meehan, Dresher, Pa.

Tariff—Theo. J. Smith, Chairman, Geneva, N. Y.; Irving Rouse, Rochester, N. Y.; J. Edward Moon, Morrisville, Pa.; Thos. B. Meehan, Dresher, Pa.; James Pitkin, Newark, N. Y.

Transportation—Charles Sizemore, Louisiana, Mo.

STATE AND DISTRICT ASSOCIATIONS

American Nurserymen's Protective Association—President, Irving Rouse, Rochester, N. Y.; secretary, Thomas B. Meehan, Dresher, Pa. Meets annually in June.

Association Oklahoma Nurserymen—President, P. W. Vaught, Holdenville, Okla.; secretary, Jim Parker, Tecumseh, Okla. Next meeting during week of State Fair at Oklahoma City, last of September or first of October.

California Association of Nurserymen—President, John S. Armstrong, Ontario. Secretary, H. W. Kruckeberg, Los Angeles, Cal.

Canadian Association of Nurserymen—President, E. D. Smith, Winona; secretary, C. C. R. Morden, Niagara Falls, Ont.

Connecticut Nurserymen's Association—President, Walter E. Campbell, New Haven, Conn.; secretary, F. L. Thomas, Manchester, Conn.

Idaho Nurserymen's Association—President, Anton Diedricksen, Payette, Idaho; secretary, J. F. Litooy, Boise, Idaho. No definite time has been set for next meeting. Probably in July at Boise, Idaho.

Illinois Nurserymen's Association—President, Guy A. Bryant, Princeton, Ill. Secretary, A. M. Augustine, Normal, Ill.

Massachusetts Nurserymen's Association—President, John Kirkegaard, Bedford, Mass. Secretary, David C. Stranger, West Newbury, Mass.

National Association of Retail Nurserymen—President, E. S. Osborne, Rochester, N. Y.; secretary, F. E. Grover, Rochester, N. Y.

New England Nurserymen's Association—President, A. E. Robinson, Lexington, Mass.; Secretary, R. M. Wyman, Framingham, Mass.; Annual meeting will be held on the last Tuesday in January in Boston.

New Jersey Association of Nurserymen—President, Carl H. Flemer, Springfield, N. J. Secretary-Treas., A. F. Meisky, Elizabeth, N. J.

New York State Nurserymen's Association—President, E. S. Osborne, Rochester, N. Y.; secretary, H. B. Phillips, Rochester, New York. Next meeting September. Probably at Utica.

Ohio Nurserymen's Association—President, H. S. Day, Fremont, Ohio; secretary, W. N. Scarff, New Carlisle, Ohio; treasurer, A. R. Pickett, Clyde, Ohio.

Oregon-Washington Association of Nurserymen—President, C. F. Breilhaup, Richland, Wash.; secretary, C. A. Tonneson, Tacoma, Wash.

Pacific Coast Association of Nurserymen—President S. C. Miller, Milton, Oregon; secretary-treasurer, C. A. Tonneson, Tacoma, Wash. Place of next meeting to be decided later.

Pennsylvania Nurserymen's Association—President, Adolf Muller, Norristown, Pa. Secretary, Henry T. Moon, Morrisville, Pa.

Southern Nurserymen's Association—President, H. C. Caldwell, Atlanta, Ga.; Vice President, S. W. Crowell, Roseacres, Miss.; Secretary and Treasurer, O. Joe Howard, Pomona, N. C. The next meet-

ing is to be held in Atlanta, Ga., the 20th and 21st of August.

South Western Nurseryman's Association—President, W. A. Wagner, Durant, Okla. Vice Pres., J. M. Ramsey, Austin, Texas. Secretary-Treasurer, L. J. Tackett, Fort Worth, Texas. The next meeting will be held in Dennison, Texas, First Wednesday in September.

Tennessee Nurserymen's Association—President, George W. Poague, Graysville, Tenn. Secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Tennessee State Florists' Association—President, Leon Geny, Nashville, Tenn. Secretary-treasurer, G. M. Bentley, Knoxville, Tenn.

Texas Nurserymen's Association—President, William B. Munson, Denison, Texas; secretary-treasurer, J. M. Ramsey, Austin, Texas.

Western Association of Nurserymen—President, Lloyd C. Stark, Louisiana, Mo.; secretary-treasurer, E. J. Holman, Leavenworth, Kan. Meets annually second Wednesday in December.

AMELANCHIERS

Shad Bushes, as Amelanchiers are often called because they are supposed to flower when shad begin to ascend the rivers from the sea, add much to the beauty in early May of the Arboretum where they have been planted in considerable numbers. Amelanchier is almost entirely confined to North America where many species are found from Saskatchewan to Louisiana and from the Atlantic to the Pacific, one extra American species occurring in central Europe and another in central China. All Amelanchiers produce abundant pure white flowers in short drooping racemes, and blue-black sweet and edible berry-like fruits. The American species vary from shrubs hardly more than a foot or two high up to trees exceptionally sixty or seventy feet tall. The first species to flower, *A. canadensis*, is the larger of the two tree species, and although it grows in western New York to a large size it is more common in the south where it is often the only species. The more common northern tree, *A. laevis*, is a native of the Arboretum and is readily distinguished in early spring by the purple color of its young leaves. *A. oblongifolia*, which is a large arborescent shrub, is also a native of the Arboretum. It is this species which is gray in early spring from the thick felt of pale hairs on the young leaves and flower-clusters, and which has been largely planted along the Arboretum drives and was in bloom in May. A large collection of the shrubby species, American and foreign, is in the border on the left-hand side of the Meadow Road and on some of these plants flowers will open until nearly the end of May. For the lovers of flowers the season of Shad Bushes is one of the interesting periods in the Arboretum.

PRUNUS DASYCARPA

Prunus dasycarpa, which is sometimes called the Black Apricot from the dark color of its slightly downy fruit, is the first of May one of the handsome flowering trees in the Arboretum. It grows here both as a great round-headed shrub with several stems or as a tree with a single trunk, and every year is completely covered with its flowers composed of pure white petals and a bright red calyx. This tree, although it has been known in European gardens for at least a century, is apparently extremely rare in the United States. Its origin is doubtful; it has been considered a native of Siberia, but it is now generally acknowledged that it is a hybrid between a plum and an Apricot. Although this tree has been growing in the Arboretum for twenty years, there is no record that it has produced fruit here on more than two occasions.

INVESTIGATIONS WITH PECANS

C. D. Matthews Bien. Rpt. Comr. Agt. N. C., 1917-18, p. 87

A brief progress report on investigations with pecans being conducted at the Truck, Coastal Plain, and Piedmont Stations of the North Carolina Department of Agriculture.

The work of variety testing has shown the marked

adaptability of certain varieties to North Carolina conditions, while others are proving undesirable. Performance records of individual trees kept at the several stations have shown that trees of the same variety under identical conditions are uniformly heavy yielders, while others are very poor producers. Some trees produce uniformly large nuts and others uniformly small nuts. These results have been used as the basis for bud selection work.

Correct cultural practices, such as tillage and the use of cover crops, have given good results in the increased size of trees as well as in the increased size and number of nuts produced when compared to trees grown in sod.

Investigations dealing with the methods of budding and grafting employed in top-working pecan trees have led to the opinion that top-working should be confined, as a general rule, to trees not over 8 to 10 years old to be entirely successful. A combination of both grafting and budding has given the most satisfactory results.—*U. S. Experiment Station Record.*

WANTED

A Horticulturist either landscape gardener, nurseryman, florist or truck gardener who has made good, and who, for any reason desires to make a change, and has about three thousand dollars to invest, may be interested in a proposition that I have to make.

Address E. F. G. care The National Nurseryman.

ONE OF THE LEADING FIRMS at Boskoop, Holland with special culture of nursery-stock for the American market, ask sole Agency for the U. S. and Canada. Import House preferred.

Address Box 77, Care The National Nurseryman.

WANTED—Experienced Foreman capable of handling a nursery plant located in middle west containing sixty acres of a general line of growing stock. Must be able to handle men, understand the keeping of records and detail work. Give experience, reference and salary expected. Box 548, in care of National Nurseryman.

HELP WANTED—Nurseryman capable of handling men. Knowledge of propagating not necessary. Permanent position and good wages to the right man.

S. G. HARRIS - - - Tarrytown, N. Y.

WANTED—Young man with some selling experience to call on the Florist and Nursery trade in the East and Middle West. Good opportunity open for the right party. State age, experience, references and salary expected. Address SALESMAN, National Nurseryman.

FOR SALE

FOR SALE

Apple Trees 7-9 years old 1-2 inch, Standard Pears 4-7 years old, 1-1 3/4 inch Caliper; Plums, European and Japan 1-2 inch Caliper in carload or box lots. Reasonable Prices.

PATRICK O'HARA,
Dansville, N. Y.

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices. We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

HARDY PERENNIAL PLANTS

Phlox, Iris, Delphiniums, Shasta Daisies and many other perennials. Send us your want list for prices or ask us for wholesale price-list.

WILLIAM TOOLE & SON,
Hardy Plant & Pansy Farm,
Baraboo - - - Wisconsin

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials.

Send us your want list.

Inspect our stock.

The Gardeners' Chronicle

(Established 1841)

The BEST and OLDEST horticultural paper in England. Price 4d per week.

Send for free copy and subscription rates to:—

The Publishers, 41 Wellington St.

W. C. 2, London, England



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address
The Florists' Exchange, P. O. Box 100, Times Square Sta.

ALL "AMERICAN NURSEYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.

147 Summer St.

Boston, Mass.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries
Raspberries
Blackberries
Dewberries
Berberry

Currants
Gooseberries
Grape Vines
Privet
Spirea

Rhubarb
Asparagus
Horseradish
Hardwood Cuttings
Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS

NEW CARLISLE

OHIO

A Large Stock of

Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES and SHRUBS. All stock clean and thrifty, the best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO.

OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1920

Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; California Privet, 2, 3, and 4 years; Sugar Maple Seedling, six inches to ten feet.

Write for Prices

We sell to THE TRADE only, and make a specialty of

OREGON CHAMPION GOOSEBERRY PERFECTION CURRANT CLEAN COAST GROWN SEEDLINGS

We also have growing for fall delivery a large assortment of general nursery stock, including Fruit, Shade, and Ornamental trees, Roses, Etc.

Head Quarters for Nursery Supplies.

Correspondence invited.

Portland Wholesale Nursery Co.

122½ Grand Avenue,

Portland, Oregon

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

When writing to Advertisers please mention the National Nurseryman.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.



NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and
PRINTED IN ANY MANNER that may be called for

*Prices as low as First-Class Work and Unequalled Promptness in
Delivery will justify.*

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

RAFFIA

Another shipment just received
Containing Our Usual Brands

SEND FOR PRICE-LIST

Thomas B. Meehan Co.

DIRECT IMPORTERS

Dresher - - Penna.

Subscribers to "Nurserymen's Fund for Market Development."

New Crop N. C. Peach Pits

All old Pits sold. Write for full information on new crop. Supply limited. No time to lose.

J. Van LINDLEY NURSERY CO.
Pomona, N. C.

Subscribers to Market Development Fund.

Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

Write for our List

Cannas, Dahlias and Gladioli

C. BETSCHER, Dover, O., U. S. A.

Harrisons' Barberry Thunbergii

The plants we have to offer are up to our usual high standard, well-branched, bushy, with an abundance of fibrous roots,—the kind that will live and thrive.



10,000	12 to 18 inch
50,000	18 to 24 inch
50,000	2 to 2½ ft.
25,000	2½ to 3½ ft.

If you are in need of a large quantity of Barberry it will pay you to visit our Nurseries.
WE INVITE INSPECTION.

A complete list of our offerings will be sent promptly upon request.

HARRISONS' NURSERIES,
Nurserymen *Orchardists*
BERLIN, MARYLAND

Subscribers to "Nurserymen's Fund for Market Development."

Press of Robinson Publishing Company, Hatboro, Penna.

121



THE NATIONAL NURSEYMAN



SEPTEMBER 1919

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



Our Specialty

A large assortment of high quality Nursery
Stock for the Wholesale Trade.
Fruit Trees, Small Fruits, Ornamental Trees,
Shrubs, Roses, and Vines.

A FINE LOT OF

Elm, American White, all sizes

Wanted — Hansen Hybrid Plums and Compass

Ask for Trade Lists. Write us about your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants

Everbearing and Standard

From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company

Strawberry Specialists,

Salisbury, - Maryland

Subscribers to "Nurserymen's Fund for Market Development."



Be a regular Customer, for we have a
complete line of stock grown and cul-
tivated to the highest standard, for a
particular retail trade.



C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."



The
Preferred
Stock

The
Preferred
Stock



A WISE BIRD

is the nurseryman who starts early to engage his supplies of stock for fall and spring trade. It is already evident that there will be shortages in nearly all lines. To avoid disappointment buy early.

OUR FALL PRICE-LIST is now in the hands of the printer and will be mailed out early in the month. If you have not received it by the 10th, write for it and also ask to have your name put on our mailing list. Our price-lists are always of interest to the trade and often offer some of those scarce articles not easily to be located.

Use printed stationery or enclose business card. when writing. We mail our lists to the trade only.

Jackson & Perkins Company
Newark, - New York

The
Preferred
Stock

The
Preferred
Stock

THE BEST IN NURSERY PRODUCTS

EVERGREENS

ARBOR VITAE AMERICAN, Compacta, Conica Densa, Globosa, Hovey's Golden, Pumila and Pyramidalis. Box pyramidal and bush form. Fir, Balsam, Cephalonian, Concolor, European Silver and Nordman's. Juniper Alpina, Cracovian, Irish and Sabina. Pines, Excelsa, Mugho, Scotch and White. Retinispora Argentea, Filifera, Filifera Aurea, Liptoclada, Lycopodoides, Obtusa Aurea, Pisifera, Pisifera Aurea, Plumosa, Plumosa Aurea and Squarrosa Veitchii. Spruce, Hemlock, Norway, Oriental, Polita, Pyramidal and White. Yew, Cuspidata and Elegantissima.

Apples, Pears and Cherries, Deciduous Trees,
Shrubs, etc.

Send us your list of wants

HOOPEs, BRO. & THOMAS COMPANY
THE WEST CHESTER NURSERIES

West Chester, Pa.

Established 1853

Incorporated 1907

BAY TREES

STANDARDS, 30, 40, 44, 48 inch crowns

PYRAMIDS, 6 ft., 6-7 ft., 7 ft., 8 ft.

SHORT STEMS in 6 sizes

BUSH SHAPE, 24 in. high, 15-18 in. diam.

Ready to ship now in tubs.

RAFFIA

A. A. West Coast Brand

XX Superior Brand

Red Star Brand

Bale lots or less

Prompt shipment.

Reduced Prices.

HARDY JAP. LILY BULBS

Auratum, Rubrum, Album,

Melpomene, Magnificum, etc.

Late Fall shipment.

Bamboo Canes

Dutch Bulbs

Paeonies, etc.

Write for prices, etc.

McHUTCHISON & CO.

95 Chambers St.

New York

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

COLLECTORS OF TREE SEEDS

THE

North-Eastern Forestry Co.

CHESHIRE

...Connecticut...

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

PROTECT YOUR TRADE

by supplying stock from the

PAINESVILLE NURSERIES

The Storrs & Harrison Co.

NURSERYMEN - FLORISTS - SEEDSMEN

PAINESVILLE, OHIO

Established 1854

1200 Acres

Subscribers to "Nurserymen's Fund for Market Development."

We would be glad to receive your Want List

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

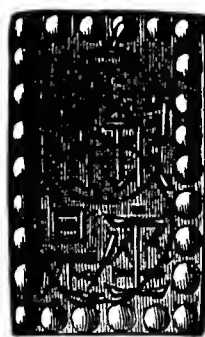
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

FRUIT TREES ROSES and other ORNAMENTALS

For the wholesale trade.
All of our own growing.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
and
HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

73 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

*Our usual general assortment
of Nursery Stock to offer
for Fall 1919*

APPLE
PEACH
CHERRY
PLUM
SHRUBS
VINES, Etc.

Head quarters for Norway Maple
and American Elm.

C. M. Hobbs & Sons
Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

Are You Troubled

with lost or "astray" shipments of nursery stock, to say nothing of other difficulties experienced through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a reputation for giving you "what you want when you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

West Chester, Pennsylvania



BEEMAN

1 HORSE TRACTOR

It Plows, Cultivates, Harrows, Mows, Does 1 horse work at ½ horse cost. Successfully operated by unskilled labor. Thousands of pleased users. Does not pack ground. Turns sharp corners, goes close to fences. Useful the yr. around.

\$285

f. o. b. Factory

The Original Garden Tractor

also a 4 h. p. gas engine that operates pumps, washing machine, cream separator, churn, grinder and does other belt work. Moves from one job to another under its own power.

Write for interesting free booklet giving full information.

Beeman Garden Tractor Co.
357 Sixth Avenue
South Minneapolis, Minn.

WANTED

FOR FALL PLANTING

Asparagus Roots Rhubarb Roots
Flowering Bulbs of all kinds
Flowering Plants as follows:
Field-grown Rose Bushes Chrysanthemum, Hardy
Golden Glow, Hardy Phlox, Hardy Lily of the Valley
Peonies Irises
Berry Plants Fruit Trees Grape Vines
Evergreen Shrubberty

For Spring Planting

Dahlias Lillies Gladioli
Mail us your Catalogue and Price List

BEAUTY ROSE CO.

PHILADELPHIA

Box 697

PA.

F. & F. NURSERIES
Springfield, N. J.

Our SPECIALTY

Growing evergreens for lining out on contract.

Rosedale Nurseries

will make

Attractive Prices

on

Many lines of stock, both deciduous and evergreen. Grown for a high-class retail trade, this superior stock will, of course, cost you more, but you will agree 'tis worth more. Liberal Discounts. Large sizes for immediate effect.

S. G. HARRIS

Tarrytown

-

New York

IBOLIUM

THE NEW HYBRID

To be sent out in Fall 1919.
THE ELM CITY NURSERY CO.

HARDY PRIVET

(L. Ibota x Ovalifolium)

More about it later.
Woodmont Nurseries, Inc.

Introducers of BOX-BARBERRY
NEW HAVEN, CONN.

When writing to Advertisers please mention the National Nurseryman.

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Cherry 2 Year Usual Supply.

Demand very heavy no more Car lots to offer, can furnish limited amounts in assorted Orders.

Cherry, One Year

Thrifty and nice, will only dig limited number. Not as heavy as usual owing to cold April. Will make excellent two year. Prefer to carry over if our customers will let us.

Peach, One Year

Limited amount in assorted Orders only.

Apple 2 Year

General List Leading Varieties in limited quantity.

Hardy Nut Trees

Grafted and Budded Pecans, English Walnuts and Grafted Black Walnuts in the best Varieties.

Trade List now ready.

Subscribers to "Nurserymen's Fund for Market Development."

FAIRFIELD NURSERIES
FRUIT AND SEED FARMS

I have sold all the stock I will have this Spring, but this Summer I will be ready to book orders for Fall, 1919 and Spring 1920 delivery.

The war is over and good times are ahead. No more guns or ammunition will be needed, but you will want more of my Grape Vines, Scarlet and Crimson clover and Cow-Peas than ever before.

Keep me in mind.

CHAS. M. PETERS

P. O. Address Salisbury, Wicomico County, Maryland.
Long Distance 'Phone and telegraph, Salisbury, Maryland.

Hill's Evergreens

SINCE 1855

Complete stock of leading varieties in Firs, Spruce, Pines, Arborvitae's, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

The D. Hill Nursery Co., Inc.

Evergreen Specialists.

Largest Growers in America.

Box 401, Dundee, Illinois

THE WESTMINSTER NURSERY
J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Fall 1919

250,000 Cal. Privets in grades, 1, 2, and 3 yrs.

300,000 Asparagus, 2 and 3 yr., Asst.

Barberry Thun., 18-24 in. and 2-3 ft.

Lombardy Poplars in grades 6 to 16 ft.

Oriental Planes in grades 6 to 12 ft.

Tulip Poplars, 6-8 ft.

Horse Chestnuts in grades 7 to 12 ft.

Catalpa Spec in grades 8 to 12 ft.

Butter Nuts 4 to 8 ft., in grades.

Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft., Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft. and 4-5 ft., Hydrangeas P. G., 2-3 ft. Write for Prices.

Willowdale Nurseries
KENNETT SQUARE, PA.

WE OFFER FOR FALL 1919

100,000 Privet in sizes from 2 to 5 ft.

Oriental Planes, American Elms.

Norway, Sugar, Sycamore and Silver Maples.

Pin and Red Oaks.

American, European and Silver Linden.

White Dogwood, Horse Chestnuts and Lombardy Poplars.

Salisburias and Tulip Trees.

Butternuts, Filberts, Walnuts and Pecans.

Evergreens and Shrubbery in good assortment.

Have many large Shade Trees in caliper from 3 to 8 inches.

Send list of wants for prices.

THE RAKESTRAW-PYLE CO.

KENNETT SQUARE

PA.

Small Fruit Plants
and Shrubbery for the
Wholesale Nursery
Trade.

List ready September 1st.

P. D. BERRY & SONS

Dayton

Ohio

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.

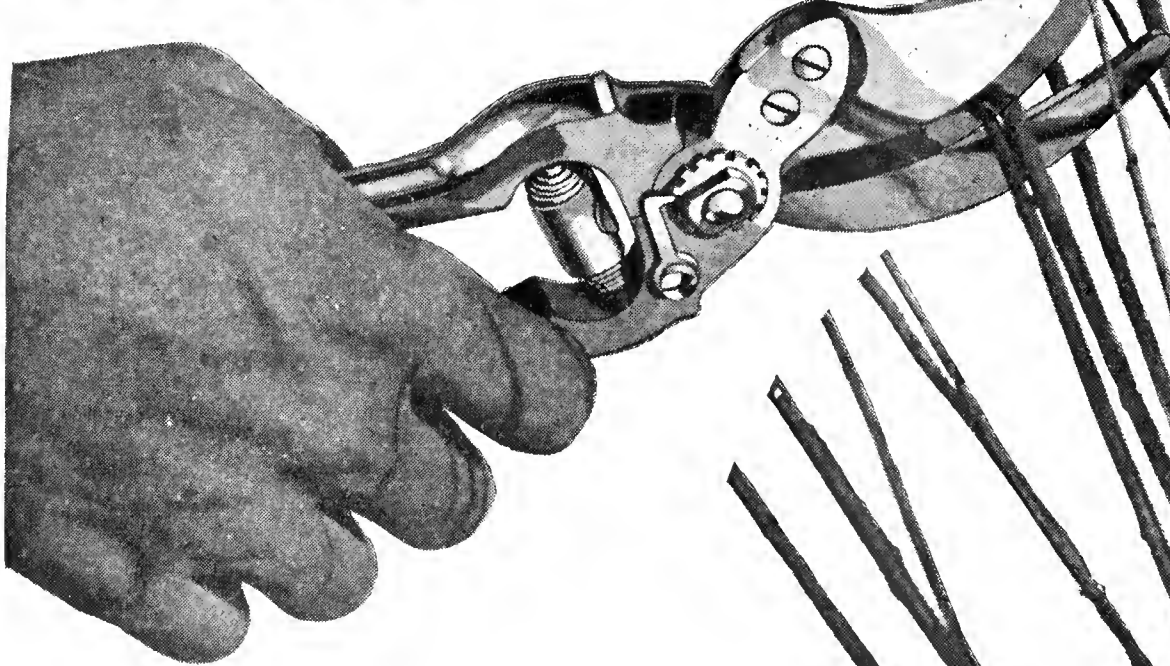
100 William St.

New York, N. Y.

PEXTO

TOOLS

FOR USE ABOUT THE HOME AND FARM
FOR THE MECHANIC IN EVERY TRADE



Sell More Nursery Stock

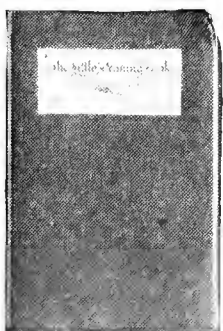
This Book and Plan Will Help You

Take care of your old customers but *keep adding new ones*. It's the only way to show a healthy increase in business and profits each year.

The Little Pruning Book offers the solution. It is an authoritative guide to correct pruning. Illustrates and explains how, when, and where, to prune for bigger and better fruit, flowers and plant life in general. Familiarize more customers with the fundamentals underlying the art of pruning and greater interest and more purchases will result.

The Plan Behind the Book

This Book Sells in Book Stores for 50 Cents



Our selling plan increases *your* profits by placing *The Little Pruning Book* in the hands of your customers *through you*. Your sales of nursery stock will increase as a matter of course.

Sending for a free volume does not obligate you in any way. It will bring you details of our cooperative plan of distributing this educational work, through nurseries. The author of this book, F. F. Rockwell, is now manager of the Nurserymen's National Service Bureau.

THE PECK, STOW & WILCOX COMPANY

Mfrs. Mechanics' Hand Tools, Tinsmiths' and Sheet Metal Workers' Tools and Machines, Builders' and General Hardware.

Southington, Conn.

Cleveland, Ohio

Address correspondence to 2189 W. Third St., Cleveland, Ohio

100% American for 100 years. Founded in 1819



When writing to Advertisers please mention the National Nurseryman.

Princeton Products

are

Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

Here's An All-Around Tree

There is really only one all-purpose tree you can recommend to your customers. They come to you for perhaps one tree or a dozen, and many of them do not know what they want. So they say, "Let me have a tree for shade," or, "Some trees to make a boundary," and if you desire to do just right by them it is certain that

Norway Maples

will be what you'll recommend. When trees are as well cared for as ours you are sure of results—the tops and roots guarantee them. We can furnish them from 1 to 3½ inches caliper and we can deliver by motor truck within 50 miles of New York.

How many can you use?

Swan River Nursery

Patchogue, New York

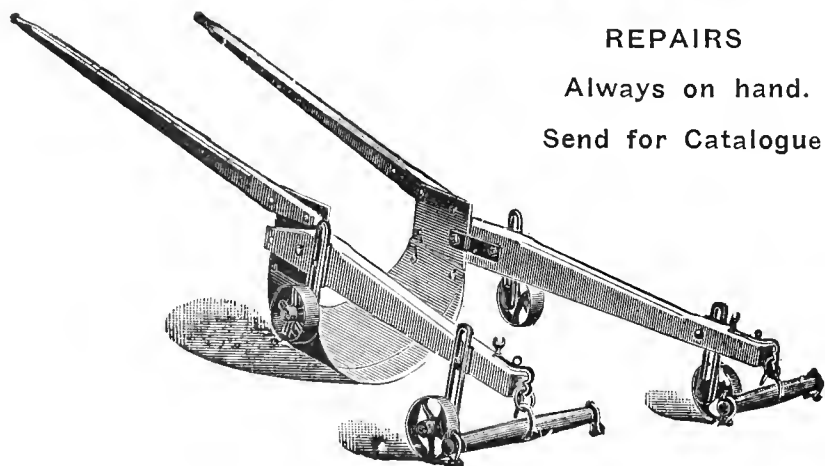
1857

1919

BRAGG'S

COMMON SENSE

TREE DIGGER



REPAIRS
Always on hand.
Send for Catalogue

Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.

KALAMAZOO, MICH.

Ornamental Nursery Stock

TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS PLANTS

Large assortment. Long list of varieties and sizes

Get our New Trade Catalogue,—ready September.

Spring price list out of date.

Thomas B. Meehan Co.

WHOLESALE NURSEYMEN,

DRESHER PA.

Subscribers to "Nurserymen's Fund for Market Development."

CHAMPION NURSERIES, Perry, Ohio

Offer the Following Stock

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6. to 8 ft., 8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4 ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet, California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSERYSTOCK

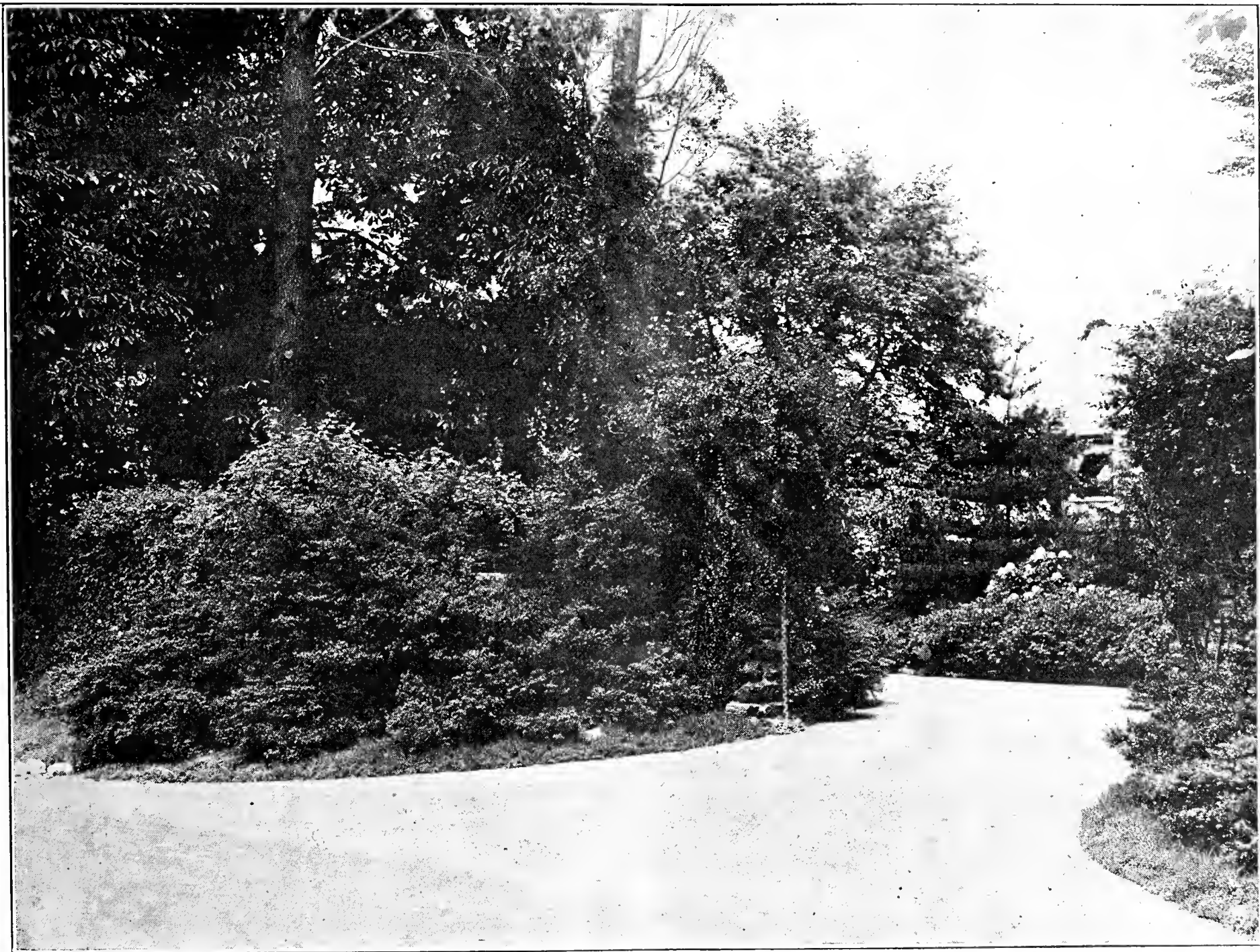
The National Nurseryman Publishing Co., Incorporated

Vol. XXVII.

HATBORO, PENNA. SEPTEMBER, 1919

No. 9

A Well Planted Entrance



Ilex crenata and other evergreens used at the entrance of an attractive home.

OUR illustration shows an entrance that has been exceptionally well treated from a landscape point of view. A well traveled road leads in front of the residence. The place is also in a fairly thickly populated section. The picture gives no suggestion of this, and makes it appear to be away out in the country, yet there are houses surrounding it on every side.

The plantings as seen on the outside of the piers consist mainly of *Ilex crenata*, which is perhaps the most satisfactory and dependable of all the evergreen shrubs. It is more dependable than the Rhododendrons, Azaleas,

etc., as it seems to be satisfied with almost any kind of soil, and is rarely affected by diseases or pests, even when neglected or growing in uncongenial positions. Too much cannot be said in its favor, for such positions as those indicated in the picture.

One can readily imagine what would have happened to these particular grounds if an amateur landscape gardener had attempted to lay them out. The tendency would have been to clear off the native growth, square everything up and plant things in pairs, or use that tiresome formality which is so evident in all suburban sections of large cities.

Here the landscape artist preserved the natural

growth. In fact, that is what gave him the key to the type of plants to use in laying out the grounds.

The residence to be seen through the opening is comparatively near the road. This is cunningly hid by a large group planting, consisting of White Pines, Rhododendrons and the evergreen Azaleas, necessitating curved roadways instead of the straight lines, one road leading to the back or service entrance, and the other to the front of the house. This, of course, is not shown on the photograph.

The most noteworthy features of such a landscape effect is the remarkably beautiful and artistic results that have been produced in such a limited and unfavorable position.

Although it is not at all apparent from the picture, the position is extremely shady and might be considered a difficult position to treat, or to get good results from, but this has all been brought about by the proper selection of plants rather than the design, and a selection of plants that will thrive and look well under such conditions.

The writer passed this entrance daily throughout the year. It is always pleasing. Even in the winter when other places are forlorn and dreary this one always seems bright and cheerful, due to the predominance of the proper selection of evergreen plants. In the spring, when the *Azaleas*, *Hano-de-Giri*, *Ledifolia* and Rhododendrons are in bloom, passing the gate one gets a glimpse into a real garden.

FALL PLANTING

Nurserymen could not do better than start an energetic crusade to encourage Fall planting wherever it is feasible and practical. It would be both an advantage to the customer as well as himself. September should really usher in a more active season in the Fall than does April in the Spring.

Fall planting cannot be urged too strongly or too often. The nurseryman has such an extremely short period in which he can dispose of his goods that any opportunity to lengthen out this period cannot be overlooked.

For so many years planting in spring, like the house wife's spring cleaning, has become a custom of the season. The unfortunate part of the custom is that it has given the layman the impression that it is the only season in which it can be successfully accomplished. The plantsman knows transplanting can be done almost at any time throughout the year, depending upon climate and local condition. There are really only two seasons of the year when planting is not always practical, namely July and August, due to the heat and drought which often prevails at that time, and December, January and February, due to the ground being frozen, making the operation impractical. Where these conditions do not exist, planting may take place practically at any time throughout the year.

Everything considered, the Fall season is really one of the best times for planting of the whole year. It is ideal for evergreens that are lifted with a ball. As soon as the season's growth is completed and become firm, they may be moved with safety, the earlier the better.

The ground is warm and if properly handled they will make root before the cold weather sets in, and so become established in their new quarters, and in condition to take advantage of the early growing weather next season. You practically gain a year by planting in the Fall rather than in the Spring.

If the planting is left until Spring, unless it be done very early, the growth is checked a great deal more than when it has been done in the Fall previous. In the case of Deciduous trees and shrubs, just as soon as growth is completed and the wood is firm, planting may be done. It is always advisable to strip the leaves and sometimes prune back a little.

When done early, the plants will become established before the cold weather sets in. In the case of large trees it is always well to guide them, as there is more or less danger from winds, before they are firmly established in the new quarters.

NURSERY STOCK IMPORTATIONS PERMITTED FROM CONTIGUOUS COUNTRIES.

*Plants and Seeds Will be Received in This Country
When Free from Disease and Insect Pests.*

Washington, D. C. Importations of nursery stock, other plants and seeds from contiguous countries, the entry of which will not be attended by serious risk to the agriculture, horticulture, and floriculture of the United States, are permitted by an amendment to the Plant Quarantine Act, according to an announcement just made by the United States Department of Agriculture. The amendment known as "No. 3 to Regulations Supplemental to Quarantine No. 37," is to be effective August 16, 1919. Under it the Secretary of Agriculture may issue permits, when applications are made, authorizing the entry into the United States of such nursery stock, other plants and seeds when they are free from disease and insect pests and it is known that their entry will not be attended by serious risk.

Importations under this new regulation are limited to specific classes of nursery stock, plants and seeds which can be considered as peculiar to such contiguous countries, and are not mere reproductions of imported stock from foreign countries, and which are not available in sufficient quantities in the United States. It does not apply to plants and seeds governed by special quarantines and other restrictive orders other than Quarantine No. 37, which is now in force. In addition to the certificate as to freedom of pests required in connection with all plant importations the invoice covering the material offered for entry under this regulation must be accompanied by a certificate of a duly authorized official of the country of origin, stating that the material has been produced or grown in the country from which it is proposed to be exported.

Writing under date of August 4th, Mr. G. Hale Harrison of Harrisons' Nurseries, Berlin, Md., says "We are shipping now daily several cars of peaches. We are picking to-day the variety Champion."

SOFT WOOD CUTTINGS

During August and September the cutting frames should be in full operation. There are so many shrubs and plants that can be profitably propagated in this manner, and since quarantine 37 is in effect, it behooves every nurseryman to give at least some attention to this branch of his business.

If a frame is available no time should be lost in getting it into operation. While perhaps not absolutely essential, a little bottom heat is always a great help in getting the cuttings to root. 18 inches to 2 feet of horse manure thoroughly shook up, and firmed down evenly, watered, will create sufficient bottom heat for the purpose. Cover this over with three inches of good sharp sand.

In handling cuttings at this time of the year when the weather is liable to be hot and dry, every precaution should be taken to keep them from wilting. Wood should be cut fresh, kept sprinkled and covered and not exposed at all to the wind and sun, either in making or in putting in the sand. The success, of course, will depend largely upon the skill of the propagator, but after all, anyone who understands the principles and will take sufficient interest to watch them continually, can insure a good strike, and when the propagator really becomes interested, it is surprising what success he will have even with plants that are considered difficult to root. Success depends upon intelligence, watchfulness, etc., rather than upon any set rules. The best propagators are always those who can adapt the conditions and materials to what is needed to accomplish their purpose.

Nearly everyone with a garden knows how easy it is to root a rose cutting under a glass bottle. The same principle applies when propagating by the thousands in frames, and all there is in propagating from soft wood cuttings is to prevent excess evaporation from the cutting until the cutting has made roots that will support the foliage upon it and for a surplus to push out a bud. If the cuttings are overwatered, there is a tendency to damp off or decay. If too much air is given they are likely to wilt and shrivel. If there is too much sun they will scorch. It is the constant watchfulness to see they get just the right conditions to hold them in a living condition until they root.

Some plants, principally those of the hard wooded nature are much slower to root than others, hence they are more difficult to propagate by this method. Given the right conditions, however, even the most unpromising kinds will often be rooted by the skillful propagator.

In propagating, constant watchfulness is the price of success. There are perhaps as many failures after the rooted cuttings have been planted out as there are in the cutting bed, as they require attention until they have become rooted in the ground. The safest way is to pot each individual cutting up or at least bed them out in frames or in positions where shade, moisture or the necessary growing conditions can be artificially supplied should the weather prove uncongenial. This may often seem extra and unnecessary work, but it is always a safer plan unless the propagator knows well the nature of his plants. Some will stand much more hard treatment than others, depending upon their nature, but

to get a good even stand and the best results, even with those plants that usually stand a certain amount of neglect and abuse, the best treatment possible always pays.

PLANT FANCIERS

After the four years of war it does one good to again receive Catalogues from plant specialists of the old country, indicating that interest has again revived in horticulture now the war is over.

A Catalogue came to hand from R. H. Bath, Ltd., The Floral Farms, Wisbech, England, showing a list of Daffodils and Tulips. Among the former are listed varieties for which the trade price is as high as 40 shillings each, equivalent to \$10. Those who are only familiar with the commoner kinds of these bulbs that can be purchased for \$3 or \$4 per hundred or less, do not realize the money that is invested in these newer and rarer kinds, and it is rather difficult for the average American to realize there is sufficient general interest to warrant the issuing of a trade Catalogue.

There is no better barometer of a general interest in horticulture than the knowledge there is a sufficient number of purchasers of rarely and highly bred plants to warrant the distribution of a Catalogue listing them.

It takes a real plant enthusiast to pay \$10 for a single Daffodil bulb, but after all this price is not high when compared with the gems of other lines. High prices are paid for postage stamps, first editions and other useless curios, and it is not to be wondered at that the connoisseur is willing to pay for these rare floral gems.

THE METRIC SYSTEM

A propaganda to urge the adoption of the metric system in America and England, is being carried on by the World Trade Club, San Francisco, Calif. It is a subject deserving the support of everyone in the country.

Many of our boys who have been in Europe will appreciate the enormous waste in Great Britain of mental effort due to the use of pounds, shilling and pence. That same wasted effort takes place in America through our still retaining the obsolete inch, foot, yard; pint, quart and gallon, and other obsolete weights and measures that ought to have been scrapped generations ago, and yet are still in use among the English speaking peoples, while the rest of the world has adopted the metric system.

The average child of 10 who knows the metric decimal dollar and its sub-division, can learn in 10 minutes as much of the metric system as 90% of all the people ever have occasion to use.

The nurseryman has, to a great extent, adopted the metric system in his catalogue, quoting price by the ten and hundred instead of dozen and gross, and will realize to a certain extent the tremendous saving in effort that could be applied in more profitable effort in other lines.

It is a subject that deserves the interest of every citizen, and when opportunity occurs, they should urge the legislators to adopt the meter, liter and gram.

VARIETIES

It is not an uncommon criticism for landscape gardeners and planters to make "that nurserymen do not carry a full line of stock," and it is so difficult to get certain varieties without purchasing from a number of different nurseries. It is one of the most difficult problems for the nurserymen to decide just what to grow and what to leave alone.

Every up-to-date concern likes to carry as full a line as is profitable, but it is not an easy matter to decide if any particular plant or variety is going to be a good seller or if he will have to go to the expense of growing it, bringing it to a salable condition and ultimately putting it on the brush heap. Few realize so well as the nurseryman, the cost of carrying a big list of varieties, especially of such things as Roses, Paeonies, Iris, or those large families of plants of which there are innumerable kinds.

This is equally true of growers of fruit trees. There is an endless variety of Apples, Pears and other fruit, and it has to be a large concern, indeed, which can grow enough of each variety to supply the demand without having too big a surplus left of kinds that do not sell well. The average purchaser does not realize what the the additional cost of adding one variety to the list means to the nurseryman. In the first place, he has to grow sufficient of it to make it worth while listing in his catalogue, and it is useless to grow a hundred or more if there is only likely to be sale for a dozen.

Even with the specialist, handling primarily one kind of plant, such as Roses, of which there are hundreds of varieties, it is not an easy matter to select the kinds which will be readily sold, and there are men, however, wide their knowledge, who can even guess at the possible wants of the purchasers or the market.

There are certain standard kinds of which he knows it is safe to grow a good quantity, but when it comes to those that are not so well known and the much talked about novelties, it is not easy to decide whether he should put them in stock or not. It is a recognized fact that a quantity of one kind can be grown very much cheaper than the same quantity in a great number of varieties. If the nurseryman caters to a retail trade, where a great variety of stock is called for, he should naturally get much higher prices for those rare or uncommon kinds than for those that are grown in quantity, yet in looking down the list of the average catalogue they are invariably priced very much alike.

In studying this subject it is well to consider the source which creates a demand. The chief demand in America has hitherto been largely developed by the nurserymen themselves, in other words, what the nurserymen decided was a good thing, catalogued, featured and advertised, that was the item that the American buying public wanted. Now there are other causes at work. More interest is being taken in books on gardening. Travellers in the old country see gardens and fine collections of plants, take notes for themselves and of course, write to the nurseryman to find out where such and such can be procured.

Landscape gardeners are getting a broader knowledge of plants, and are asking for things not generally

carried by the average nurseryman, which is the cause of some of the criticism that "American nurserymen do not carry a full line of stock, and it is impossible to get good things that are really well worth growing." This cause or tendency is liable to increase rather than diminish, especially with the educational propaganda that is now being fathered by the National Association. Of course, all propaganda or education emanating from nursery interests can largely guide the public demand, and Quarantine 37 will largely limit possibilities of stock that can be propagated and grown in this country. It is a subject, however, that deserves a serious consideration by every nurseryman in the business, as it often makes a difference between profit and loss.

If the nurseryman disposes of all he raises, the chances are his business will be profitable, but it is those items that are failures and surpluses which he cannot sell that seriously affect his balance at the end of the year.

A nurseryman cannot afford to be too much of a plant enthusiast, as he is likely to load up his nursery with a great many kinds that he cannot grow profitably. The safest plan is to thoroughly study his trade and cater to it. When he puts in a new variety, or something he has not handled before, grow enough of it to make it worth while to specially advertise and not to grow varieties and kinds just because someone else does, or because an odd customer makes inquiry for it.

WHICH WAY WILL IT DEVELOP?

Will the purchaser of nursery stock in the future buy his plants from the nursery, and plant them out himself, or will he purchase through a planter, or in other words, will the retail nurseryman have to develop his business along the lines of keeping an organization to take care and plant all his orders, or will he be able to dispose of the bulk of his stock by merely delivering it to the purchaser?

While perhaps there will always be customers who will purchase and do their own planting, the tendency does seem to be developing along the lines where the nurseryman does the planting either himself or through jobbing gardeners.

This is especially true of localities near large cities where perhaps the bulk of the stock of the retail nurseryman is sold. Of course, on a large country estate things will doubtless always go on as they are. Stock will be purchased either through the landscape architect who is laying out the place, or through the superintendent or gardener in charge. Then there will be the isolated country residence where the owner himself is interested in gardening, but in the great majority of places in suburbs of large cities, the tendency seems to be for the nurseryman or seller to do the planting, and the nurseryman who is prepared to plant is more likely to book the order than the one who merely delivers it, leaving the planting to someone else.

It is a subject worth serious thought from the nurseryman who wishes to look a little ahead to see the lines upon which his business may be most profitably developed.

SOME FACTS OF INTEREST TO MEMBERS OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

The Credit and Collection Bureau Again Available.

The Credit and Collection Bureau formerly conducted by our Counsel Curtis Nye Smith was temporarily suspended after his release as Counsel though he courteously conducted it to accommodate us for over a month after the expiration of his contract.

The Executive Committee in Chicago directed President Moon to see what arrangements could be made for the continuance of this service that members had enjoyed. With the assistance of Mr. Watson arrangements have just been made with the United States Fidelity and Guarantee Company of Baltimore through their New York office. Any member of the American Association of Nurserymen is now entitled to subscribe to the service of this company through Secretary Sizemore's office. The fees for collections will be the same as have been previously charged under the arrangement with Mr. Smith. The credit reporting feature which the new arrangement offers ought to be a great benefit to nurserymen for they can readily secure in advance credit reports of any customer about whom they are in doubt. The service will also include collection letters, proper forms of draft and list of attorneys who are secured by bond of the United States Fidelity and Guarantee Company.

The United States Fidelity and Guarantee Company protects the Association and any members subscribing to the service by a bond of \$10,000 with a limit of \$2500 on any one attorney. This bond will for the present be deposited with President Moon. The detailed announcement will be mailed to members of the Association within a few days. Under the new plan each member is directly benefited financially for he can subscribe through his association to a service which would, if purchased separately, cost him from \$15 to \$20 per annum and while through the Association he can secure this for \$5.00 per annum which covers the cost of the list of guaranteed attorneys and the quarterly supplement thereto.

Nurserymen having claims with Curtis Nye Smith will withdraw them and be given an opportunity to subscribe to this new service to further prosecute their claims.

Vice-President Lloyd Stark paid a visit upon President Moon on Tuesday, August 19th, at which time a number of matters important to the Association were discussed and the committee appointments considered.

Committee appointments already decided upon include C. G. Perkins, 2nd, Vice-President Jackson & Perkins Co., Newark, New York, as chairman of the Legislative Committee. William Pitkin of Chase Brothers Company, Rochester, who long served efficiently as chairman of this committee, has consented to be a member of it that the committee may have the benefit of his experience. The rest of this Committee it is Mr. Moon's idea to select from the Legislative Committee of the state and sectional associations. He thereby expects to link up these associations with the National Association and to provide a direct means of communicating Legislation arising in any state with the National Chairman.

It is also decided that the duties formerly performed by the Tariff Committee will be merged with the Legislative Committee which will hereafter bear the title of

Legislative and Tariff Committee.

The Market Development Committee is to be presided over by John Watson of Princeton, New Jersey, chairman. The entire membership of this committee has not yet been announced.

E. P. Bernardin, Parsons, Kansas, and George W. Holsinger, Rosedale, Kansas, have consented to serve as a committee to edit and publish the annual report of the proceedings of the Convention recently held in Chicago.

A. M. Augustine of Augustine & Company, Normal, Illinois, is chairman of the committee to secure accommodations for the Convention to be held in Chicago in 1920 and to be generally in charge of that Convention. Thomas B. Meehan of Thomas B. Meehan & Son of Dresher, Pa., is chairman of the Committee on Relations with Landscape Architects.

NURSERYMEN'S NATIONAL SERVICE BUREAU

The program for Market Development discussed at the convention in Chicago is being put into operation as rapidly as incoming funds will allow. A call has been made for the remaining 75 per cent. of the first year's subscription and all who have not yet taken care of this balance are urged to do so immediately so that the plans laid out by the Market Development Committee may be put into active operation.

A call will soon be made on the members of the National Association who have not as yet contributed to the Market Development Fund, urging them to do their share for this current year. This is in accordance with the resolutions passed at Chicago, pointing out that inasmuch all members of the National Association will now benefit from the Market Development work, it is the duty as well as the privilege for those who have not yet contributed to help carry on the work for this year.

The meeting of the New Jersey Association of Nurserymen held at the Princeton Nurseries on the 22nd was devoted largely to a discussion of Market Development in its various phases.

The meeting was addressed by Mr. Robert Pyle, of West Grove, Pa., who attended the meeting in the absence of President Moon, who was unable to be present. Mr. Pyle pointed out the advantages to members of trade associations in joining the national association, and went into some details concerning the work of organization and standardization which the American Association is now planning to undertake.

Mr. F. F. Rockwell, Secretary of the Nurserymen's National Service Bureau, also talked on the plans made for the coming year, discussing the Delineator Nurserymen's National Service Bureau Prize Competition for improvement made in one year by the planting of Nursery stock, the syndicated articles, illustrated lectures and other features which were discussed at Chicago.

Mr. Rockwell is now endeavoring to get the Department of Parks of New York City to put in a complete small suburban planting, making a model small place at Bryant Park, or some other centrally located park, in the city. The demonstration vegetable gardens which Mr. Rockwell inaugurated in New York three years ago have been very successful, and even now that the war is over, are to be continued as a permanent feature. What has

been done to show people how to plant and succeed with vegetable gardening could also be done in showing them how to plant a small area and how to care for the different shrubs, flowers, trees, etc., going into it. If a demonstration planting of this kind can be arranged for in New York it is probable that many other cities all over the country will take up the idea just as they did with the demonstration vegetable gardens.

At the Own Your Own Home exposition to be held in one of the biggest armories in New York early in September, the Nurserymen's National Service Bureau will have a model planting around a small home, and distribute the McFarland booklets on Home Beautifying and the Home Orchard. The trees, plants and flowers for this planting have been very generously furnished by Isaac Hicks & Sons, of Westbury, Long Island, famous for "Big Trees that Save Ten Years." Mr. Kaymore, of the Hicks organization is co-operating with Mr. Rockwell on the arrangement of this small place.

The United States Government is back of the Own Your Own Home campaign, which is being carried on all over the country, and nurserymen near other large cities could undoubtedly for exhibitions of this kind in connection with this campaign. Anyone interested should write to Mr. Rockwell for suggestions concerning how to get this work started.

SEND IN YOUR LIST OF NEWSPAPERS!

Mr. Rockwell is still calling on nurserymen who have not yet responded to the opportunity they have to send in a list of newspapers in the territory in which they sell, so that these papers can be supplied with the series of syndicated articles to be sent out this fall and next spring. This service, of course, costs local nurserymen absolutely nothing. Market Development plans call for supplying these articles to a thousand newspapers. The list is not yet complete. Why not send in the names of newspapers in your own territory that you would like to have run this series. Many nurserymen last spring got orders which were the direct result of this general publicity. People coming to the nurseries mentioned the fact that they had become interested through the reading of these articles. Any nurseryman who fails to send in a list of the papers in his territory is missing out on the best advertising proposition he ever had put up to him—weekly service of this kind in his local papers for the cost of a single two cent stamp to send the list in to the Nurserymen's National Service Bureau.

CAN YOU BEAT IT?

A nurseryman recently engaged the services of a stenographer. This is a sample of the first few letters turned out. The nurseryman still has a vacancy in his office.

Dear Sir:

In the recent date I hand you herewith erat for the list which enable in as much as I can supply quotations of shrubs are supply of shrubs will be late however owing the high cost of labor wgieh will not be advisable to cost of shrubs in cost of orders therefore I would appreciate very much havung your order for any of the shrubs I supply which you will be givne that as Iam for given a opportunity to early fo the supply of serubs.

Your ruly

LIME ASSOCIATION

The Lime Association, with headquarters at the Math-er Bldg., Washington, D. C., have established an Agricultural Bureau for the purpose of developing the market for lime.

There will be a bureau concerning lime material for structural operations, a chemical bureau, concerned with the use of lime materials in various industries, and an agricultural bureau which is concerned with the use of any and all liming materials used in agriculture, including its application to the soil.

The Association does not sell lime, but is for the purpose of investigating through suitable agencies, and educating the consumer in its proper uses.

It is much on the order of our own Market Development movement, except that it is serving the lime interests, and there is no doubt but that anyone wishing information in regard to the best use for lime for agricultural or horticultural purposes, will get the most reliable information possible from the above named bureau.

Flushing, N. Y., 8, 12, '19.

Federal Horticultural Board,
Dept. of Agriculture,
Washington, D. C.

Dear Sirs:

Returning recently from Canada our ear was invaded just out of Montreal by a swarm of flies or winged ants. I am not an entomologist and could not identify them. Some of the flies or ants were in the ear when it reach-er the Grand Central Station, New York City, ten hours later. The thought that oecured to me was that probably harmful insects may reach America through other channels than by the importation of nursery stock with or without balls of earth adherent thereto.

To obviate the danger it is suggested that another quarantine or embargo be proclaimed at once interdicting international travel. This suggestion is offered that you may take steps immediately to guard American interests and incidentally the civilization of the world which may else suffer an eclipse. It would be interesting to know what harmful insects your department has kept out of the country by your activities. This is an open letter to the Federal Horticultural Board and we hope will have a prompt acknowledgement, preferably through the press, where this letter will be offered for publication. Make the best ease you can and proclaim to the world the results of your labors.

The Brown Tail Moth is reputed at the present time to be almost if not quite the most harmful of recently imported pests. There is a story current that it was introduced by a seientist in the neighborhood of Boston some years since who imported the insect specifically for study and experiment. This is a rather ugly story and we are loathe to believe it and we respectfully request that you affirm or deny its accuracy.

Very truly yours,

BLOODGOOD NURSERIES,
By Theo. Faulk.

BABY RAMBLER NOTES

Clarence Perkins has received his discharge from the service and is on the job talking Jackson & Perkins Preferred Stock once more.

Tom Stark is spending several weeks in the Southwest on business.

William Masten and Hort. Bowden sneaked off on a motor trip thru Western New York, and none got hurt either.

F. Burnett Kelly, Carl Flemer, William Flemer, Jr., and Hort. Bowden attended the Ornamental Growers' meeting in New York on August 6th.

Paul Fortmiller is spending a few weeks' vacation in Canada.

Bert Manahan is back on the job after spending his vacation fishing in the wilds of Michigan.

Warning: Don't speed going thru Nelliston, N. Y. It cost me a ten spot. Hort. Bowden.

ROADS AND TREES AS MEMORIALS

Attention has already been called to the movement to make our memorials to the heroes who died in the great war sensible, perpetual, and soundly sentimental by tree planting and the erection of community houses, instead of more monuments, arches and statues that mean nothing but vulgar display.

To this should be added another kind of memorial, which its promoters happily call roads of remembrance.

It simply means to build good roads and beautify them all along the way.

This is in consonance with the principle that ought to direct all memorial building, to wit: That the fittest memorial for the dead is the one that best serves the living.

The American Forestry Association of Washington is advocating memorial road building.

The inspiring idea is being enthusiastically adopted in some regions and ought to be in all.

Tree planting and road building are the sanest, gladdest, most wholesome war-cries of reconstruction.

Mr. Pack, of the Forestry Association, tells us that along the highway from Chicago to Saginaw walnut trees are to be planted and this will be called the Victory Highway. The people along the route have promised, he reports, to improve and beautify their property. This is a good illustration of the way in which tree planting leads to other civic improvements. The State of Maryland is one of the first to get its highway program under way. The National Defense Highway between Bladensburg and Annapolis will be a memorial to the Maryland soldiers in the great war for civilization. The Oregon Federation of Women's Clubs are back of a plan for a Roosevelt road. In New York a bill has been introduced to create a State commission to prepare plans for a Roosevelt Memorial Trunk Highway from Montauk Point to Buffalo. The city of Buffalo is now considering a Memorial Bridge to link Canada and the United States. The State of Indiana plans a Memorial Grove for every county. In Louisiana trees have been planted along the highway that leads from New Orleans to Winnipeg.

Trees and roads! These are the words constructive that best answer the ideas of the Hun destructive.

Trees and roads! These are the fairest marks of civilization.

Subscriptions are now being raised to plant a tree for every fallen soldier in France and Belgium.

Teacher, get your school to plant a tree in France!

Let us reforest that denuded land.

And let us build roads and plant trees in our own land, until America shall have the most wonderful highways in the world.

DR. FRANK CRANE in *Evening Bulletin*.

THE USE OF NAILS FORBIDDEN TO FASTEN BURLAP WRAPPING OF BALES

Charles Sizemore, Secretary and Traffic Manager of the National Association of Nurserymen has received the following letter from the President of the American Railway Express Company at St. Louis, regarding the fastening of burlap shipments with nails for shipment.

It will be noted that the use of nails will not be permitted and nurserymen should make it a point to sew the bales with twine to avoid rejection of the shipments.

American Railway Express Company,

St. Louis, Mo., Aug. 21st, 1919.

Mr. Chas. Sizemore,
Secretary & Traffic Manager,
American Assn. of Nurserymen,
Louisiana, Mo.

Dear Sir,

USE OF NAILS TO FASTEN BURLAP WRAPPING ON SHIPMENTS NURSERY STOCK

Referring to your letter of July 24th. in connection with fastening of burlap wrappings on nursery stock shipments by means of nails:

I note the expressed desire of certain Nursery Companies to continue the use of nail fastenings provided the points of nails are concealed, it being assumed that such practice would eliminate any danger of injury to the clothes or person of employees handling such shipments.

I referred this matter to all operating officials in the Southwestern Departments, and Vice President Stedman, of Chicago, handled the matter similarly with the officials in the Central Departments under his supervision, and I find the unanimous opinion is decidedly against the use of nail fastenings, and that instead these burlaps should be secured by stitching with twine or wire, to which there is no possible objection.

While I would like to grant the concession called for, the possible personal injury to employees handling these shipments when fastened by nails, even though the points of same are concealed, is too great to allow it, and I am sure you will understand the position we are obliged to take in this matter is the best for all concerned, and that we must continue to enforce the present rule whereby nursery shipments in bales must be refused when fastened with nails.

Yours Truly,

C. D. SUMMY,
Vice President.

THE VEGETABLE GROWERS' ASSOCIATION OF AMERICA.

The Vegetable Growers' Association of America will hold its eleventh annual Convention at the Hotel Statler, Detroit, Mich., September 9th to 12th.

A very interesting and full program has been arranged.

The officers of the Association are, president, Howard W. Selby; secretary, S. W. Severance.

C. W. Waid of East Lansing, Mich., is chairman of the Convention Committee.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., September 1919

Subscribers to "Nurserymen's Fund for Market Development"

THE LAW AND THE NURSERYMAN

Emerson, in his essay on Compensation says "Nothing arbitrary, nothing artificial, can endure." If we apply this statement to the horticultural laws, such as Quarantine 37, we gather a grain of comfort, realizing that most laws are both arbitrary and artificial. However, there is not much consolation, as it will take them so long to prove their fallacy, but we know that sooner or later they will become a dead letter, because they were conceived in error and brought forth in injustice.

What is it that so influences public opinion that makes the passing of such laws possible? It is largely the publishing of certain mathematical propositions depicting the money values in losses sustained through the depredation of insect pests and plant diseases. These are concluded to amount to hundreds of millions of dollars annually. The average person does not stop to realize that these losses are really natural, and without them, even from a financial point of view it would bring about absolute ruin to the producer. Without these losses railroads and ships could not carry one-tenth of the crops. There would be no such thing as a normal condition. Since the world began, nature has been, and always will be, the great adjuster. All life is so interwoven from the highest to the lowest, that to break any link in the chain is liable to have far reaching and unforeseen results. We are very apt to look on a disease or a pest from only one angle. The small fruit grower perhaps looks on the birds as pests. He would be quite willing to have them destroyed, quite overlooking the fact that if all the birds were destroyed human beings could not exist.

For these reasons, all laws dealing with horticulture or nature, should be founded on common sense, on jus-

tice and principle. If our Federal Horticultural Board could work under the title of Federal Horticultural Sanitation Board, we should have much better rules and regulations governing the movement and care of plants. Quarantining for insects and disease, unless absolute is ridiculous. The only real quarantine barrier is a natural or physical one. Climatic conditions are imperative. The same laws which prevent the pineapple from growing in Massachusetts, or the Balsam Fir from growing in Florida, control the isothermal areas of plant diseases and pests. Not all the science in the world can make a disease or an insect propagate and spread unless conditions are favorable, and all the embargoes in the world cannot keep disease and pests away when conditions are favorable for them to develop.

Arbitrary measures and artificial arrangements may seem to be effective for a time, but if half of the effort was used and all the rules, regulations and laws pertaining to horticulture in the various States, were founded on a common sense principle of sanitation, we should have better crops, and be at least working with nature instead of ridiculously trying to rule her by puny effort and silly theories.

Among all the remedies and suggestions as to the cause and cure of the present chaotic conditions, one suggestion is noted that rings true and sensible, namely "Work and save." It stands to reason that after four years of expenditures and waste unprecedented in the world's history, that there is a shortage of everything necessary to modern conditions of life, and to get back into our old channel or at least a channel that will lead to contentment and happiness, we must "work and save."

When the nurseryman, or any one interested in the importation of plants, reads the following that was clipped from the New York Evening Sun, it will make him wonder if this small vessel did not contain more potential danger to the agricultural and horticultural interests than a whole season's imports of plants from the well cared for nurseries of foreign countries.

"The four masted American schooner Augustus G. Hilton finished her first round trip voyage to-day with the record of one of the most harrowing experiences ever reported by a deep sea vessel. The schooner left Buenos Aires June 18 with a cargo of corn in bags, and a plague of weevils developed when she was ten days out, and these pests multiplied so rapidly that life aboard the vessel, on which there were two officers and a crew of eleven men, nine of whom were negroes, became almost unbearable.

The men could not step upon the deck without killing thousands of the insects, and sleeping in the forecabin became impossible. The men placed hammocks in the rigging and kept the weevils from invading these quarters by surrounding the masts with bands of cotton soaked in molasses.

Capt. Orlanco C. Sawyer, commander of the vessel, has one good eye, and this was attacked by the weevils. The pain became so severe that he twice threaten-

ed to commit suicide and was watched closely by the men. He was taken to the Marine Hospital upon the arrival of the vessel. At times the swarms of insects jammed the steering gear and it was necessary to keep a stream of water playing about the helmsman so that he could remain at his post. The men filled their ears and noses with cotton to keep the insects out.

"They was as big as bedbugs and had a bite like a lobster," declared a negro member of the crew, who said that he never more would sail on a vessel with corn from a tropic port.

The vessel docked at Pier 3, Brooklyn, but the disposition of the cargo of corn has not been decided upon."

On another page we print the form of PERMITS TO application for special permit to import IMPORT nursery stock and other plants and seeds under regulation 14, quarantine 37. It will be interesting to see if either the commercial nurseryman or florist will take advantage of this permission to import novelties and necessary propagating stock.

The rules, regulations, bonds and other restrictions thrown around the importation of a few plants must appeal to the average horticulturist as amusing, if it were not so tyrannous. It is evident those who drafted these regulations never had much experience in the importation of novelties, at least from the commercial side of it. Even under free entry the novelties were rarely a paying investment. With the added difficulty and restrictions, the novelty will have to promise very big returns before anyone would attempt to introduce it under the present regulations.

As regards necessary propagating stock, the regulations will certainly act as a deterrent against what is best rather than an encouragement to develop the fruit industry.

The clause "In exceptional cases the importation of novelties may be made for personal use but not for sale" leaves an opening for the wealthy politician with a pull, to import for his private estate. With such a set of regulations and restrictions it would have been far better to have made quarantine 37 final and complete.

OHIO NURSERYMEN'S MEETING

The summer meeting of the Ohio State Nurserymen's Association was held Monday, August 25th at the Farmers' Nursery Co., Troy, O., with the following persons present: Wilber G. Siebenthaler, Dayton, O.; H. N. Scarff, New Carlisle, O.; Peter Bohlender & Sons, Tipppecanoe City, O.; Rodger Champion, Perry, O.; Thos. A. McBeth, Springfield, O.; Robt. George, Painesville, O.; T. J. Dinsmore, Troy, O.; G. Gordon Hall, Troy, O.; W. N. Scarff, New Carlisle, O.; A. A. Dinsmore, Troy, O.; A. R. Pickett, Clyde, O.; T. R. Norman, Painesville, O.; J. S. Burton, Casstown, O.; H. N. Kyle, Tipppecanoe City, O.; H. S. Day, Fremont, O.; W. B. Cole, Painesville, O.; T. B. West, Perry, O.; A. M. Leonard & Sons, Piqua, O.; A. N. Champion, Perry, O.; John D. Siebenthaler, Dayton, O.

The forenoon was spent in business session, members reporting condition of stock and approximate quantity available for fall and spring delivery.

At the noon hour all were invited guests of Mrs. Dins-

more to a banquet on the beautiful lawn at the residence of T. J. Dinsmore, President of the Farmers' Nursery Co. Much praise was expressed and is due Mrs. Dinsmore for the success of this part of the program. The table was filled to overflowing with the good things to eat and was beautifully decorated with flowers and vines.

The afternoon was spent in inspecting the nursery and then touring to the nurseries of Baird & Hall, Peter Bohlender & Sons, and W. N. Scarff & Sons, ending with a 6 o'clock dinner at the New Carlisle Inn as guests of W. N. Scarff & Sons. This meeting was a very pleasant one throughout and enjoyed by all.

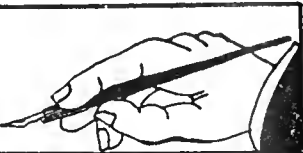
J. Fred Ammann, Retiring President of the Society of American Florists, in his address before the Convention, recently held in Detroit, speaking of the great changes brought about by the war, says:

"This colossal war is profoundly affecting American thought and life. It is safe to say that more men and women are thinking, and thinking seriously, than ever before in our history. The days of prosperity are not conducive to serious thought. Life is too easy. Things come without over much effort. At such times, we are prone to skim the surface, and miss the depths. A certain light-hearted flippancy seems to go hand in hand with prosperity. That day is gone. Times have changed. The placid depths are broken up. The days in which we live, impose upon us the duty of serious thinking and a deeper sense of gravity. This war has brought home to a good many men the consciousness that they have somehow missed the path of high endeavor. We have been walking in the shadows, instead of breathing the free air of the mountains. But today, men are searching for the way to the shining tablelands. To find that path and, when found, to walk in it, they recognize as a duty to themselves and to their country.

"This discovery means a radical change in the general attitude of life. It cannot be accomplished without a new conception of the law of attainment. Men are born to achieve. A kindly but shrewd observer of American life recently remarked, that its outstanding characteristic was the passion for attainment. And it is here that the war is teaching the great lesson of life and conduct. Before the war, men valued life in proportion to what they could get out of it. Not what they could give, but what they could get; not how much they could put into life, but how much they could extract from it. They laid life under tribute for their own ease, enjoyment and comfort. That man had attained most, who got most. The one idea was to get, and having got, to keep. There was little thought of service rendered, less of sacrifice to be made. The imperious demand on life was to give, give.

"We are slowly, but surely, learning that there is a more excellent way. The war has come with its stern demand for service and sacrifice upon the part of every American citizen. In its lurid light, we are learning the more excellent way of attainment. It is teaching the old Lent lesson that the man who seeks to save his life loses it, and the man who sacrifices his life, saves it. Who can tell, said an old Greek philosopher, whether to die may not be to live, and to live may not be to die? It was a paradox, but all life is a paradox. The man who values life by what he gets out of it, does not really live. He exists, but existence is not the attainment. It defeats its own ends. The great need of this critical moment, is that men should think of what they can give, not what they can get. The need of the hour is the extinction of selfishness."

Answers to Correspondents



Will you please tell me how nursery stock should be valued when making an inventory? We wish to arrive at a knowledge of how we stand from year to year. Very often, due to large purchases and plantings, we apparently lose money, yet it does not seem good business to set the regular value on nursery stock, as some of it finds its way to the brush pile, and we fail to realize on it from other causes.

C. B. K.

Many nurserymen refuse to recognize the inventory of nursery stock as having any value at all, claiming that it has no value until sold, and prefer to figure the difference between expenditures and receipts as a measure of business that has been done for the season.

This idea may be all very well for the old established nursery, but the books of a young concern would make a poor showing for the first few years. Even if they invested a great deal of capital in planting young stock they would have nothing to show on their books for the investment. Other concerns can carry a fixed or arbitrary valuation which does not vary from year to year. The most business-like plan would be to take inventory, price the stock at lowest wholesale rates and then give the inventory value less a certain percentage that would cover all reasonable losses under normal conditions. If the same method is applied from year to year the trial balance at the end of the season will give a truer state of the condition of the business than any other method.

It used to be a common saying among employees of florists years ago that it was a sure sign the boss lost money because he had put up a new greenhouse. Nursery stock has just as tangible a value and is more perishable than the products of the farmer, which form such a large proportion of the wealth of the country.

Dear Sirs:

Kindly let me know when to make evergreen cuttings for the greenhouse and when for the frame.

Thanking you in advance, I am

Yours truly,

A. B.

Evergreen cuttings may be stuck either in very early spring or fall. Those who have greenhouses usually commence putting them in during January and February, when little can be done outside. Of course, it is all right to put them in a cutting bench, but do not forget that some of the kinds are very slow to make root and should be moved out of the greenhouse before the hot weather comes. For this reason it is better to make flats or boxes, filling them with sand, 3 inches deep and a convenient size to handle, putting them on the bench and giving the necessary shading and attention.

The early rooted, *Arbor-vitae* and *Retinisporas* will root in a few weeks, when they can be potted up into small pots and put out in the frames preparatory to transplanting in the open ground. Those that have not rooted can be moved out of the greenhouse in April or May, should the frame be required for other purposes, and so

that it is possible to keep them cooler during the summer than under glass.

Evergreen cuttings root very readily if made and put in sand in frames during September. A little bottom heat is a great advantage.

Usually it will be found necessary to leave them in the cutting bed all the winter. They will have to be covered with leaves and otherwise protected during the severe weather. In the spring they will be ready to bed out in the open ground.

WHY THEY NEED YOU

The condition among the children in Europe are such as to demand help that is at once immediate, effective and lasting. With this thought in view the Juniors of the American Red Cross are going about the task of assisting where assistance is needed most. Foreign representatives of the Junior organization send back stories of what the children in the war districts have suffered; Dr. Livingston Farrand tells us that in northern France where the enemy held the land for four years it was the children from eight to sixteen who suffered most, their physical development being retarded four or five years.

From Serbia comes the appalling information that more than twenty thousand children are unclaimed and have no one to turn to.

Jerusalem holds many little waifs from Armenia who were driven from their homes by the Turks.

Every day in Warsaw, children clothed in rags are brought to the orphanages.

In Poland the kiddies have no clothes to their backs and are suffering for the simplest garments.

In that one small part of Russia that is Petrograd, there are seventy-five thousand homeless children.

These are but a few glimpses of the reasons why the Junior Activities of the A. R. C. should be unlimited, and the opportunities for their service are met by them with the greatest possible enthusiasm and hope for the future of every boy and every girl to whom the war or some other calamity has brought misfortune.

TREE CONCEALS BODY 57 YEARS

The startling discovery of a human body in the cavity of a giant white oak tree where it had been preserved in a mummified state for 57 years has been reported to the Milwaukee Journal from LeSeuer, Minn. In clearing a piece of land on the farm of Edward Gleek in Ottawa township, it was found necessary to cut down the large tree, which broke in falling, disclosing the fact that it was hollow for a distance of about fifteen feet, beginning several feet above the ground and the cavity ending in a large opening concealed among the branches of the lower side of the tree, which leaned considerably. Within this hollow was found by the horrified choppers the mummified body of a man, not at all decayed, but dried and shriveled into something rivaling the best Egyptian art. Mr. Gleek, on being summoned by the frightened laborers, recognized in the mummy the body of Jean LaRue, a former servant of Mr. Gleek, who had mysteriously disappeared from the farm August 13, 1862. On that day, which was during the Sioux uprising, a boat load of sol-

diers on their way up the Minnesota river from St. Paul to New Ulm, foolishly discharged their muskets several times, carrying terror to the hearts of people along the river who were already about to flee from the dreadful Indians. Jean LaRue heard the firing, he seemed to nearly lose his reason from fear, rushed into the house, seized his rifle and some other belongings, including about \$700 in money, and fled. He must have known of this hollow tree, sought to hide there, slipped down too far, and being unable to extricate himself, must have perished there where his body, preserved in the living oak, failed to decay. His rifle, bullet pouch and powder horn were found by him and the money, \$783.50, was found in his pocket.—*American Florist*.

MILLION COOLIES NEEDED IN THE U. S.

That the importation of one million Chinese coolies, under Government supervision, and their use as farm laborers and household servants, would increase the production of foodstuffs twofold, and inevitably decrease food costs, is the opinion of Hudson Maxim, internationally famous inventor, who was interviewed at the Bellevue-Stratford yesterday.

"Through the use of coolie labor," said Mr. Maxim, "the State of Louisiana alone could within a few years' time produce more sugar than is now produced in Cuba and in the United States. The Chinese would, of course, be restricted from marriage, and could not become landowners. They would have a daily wage of fifty cents; two suits of clothes a year and their keep. They could return to their country any time they desired, provided they pay their own transportation, and the Government could also deport them at any time it so chose.

"The Chinese coolie is really a human tractor," continued Mr. Maxim. "He is possessed with dynamic energy, and an indefatigable worker and he gets results. Toil is his birthright. Today, in China, millions of coolies die of slow starvation, unable to gather the little bit of rice they need for nourishment."

Mr. Maxim spoke of the shortage of labor in the United States, and told how efficient the Chinese coolie was and how the household labor problem could be solved. He then told of how the Allies imported the coolies into their countries, placing them on the construction of railroads and bridges and how efficiently they performed their task.

Hudson Maxim,—in Phila. Press.

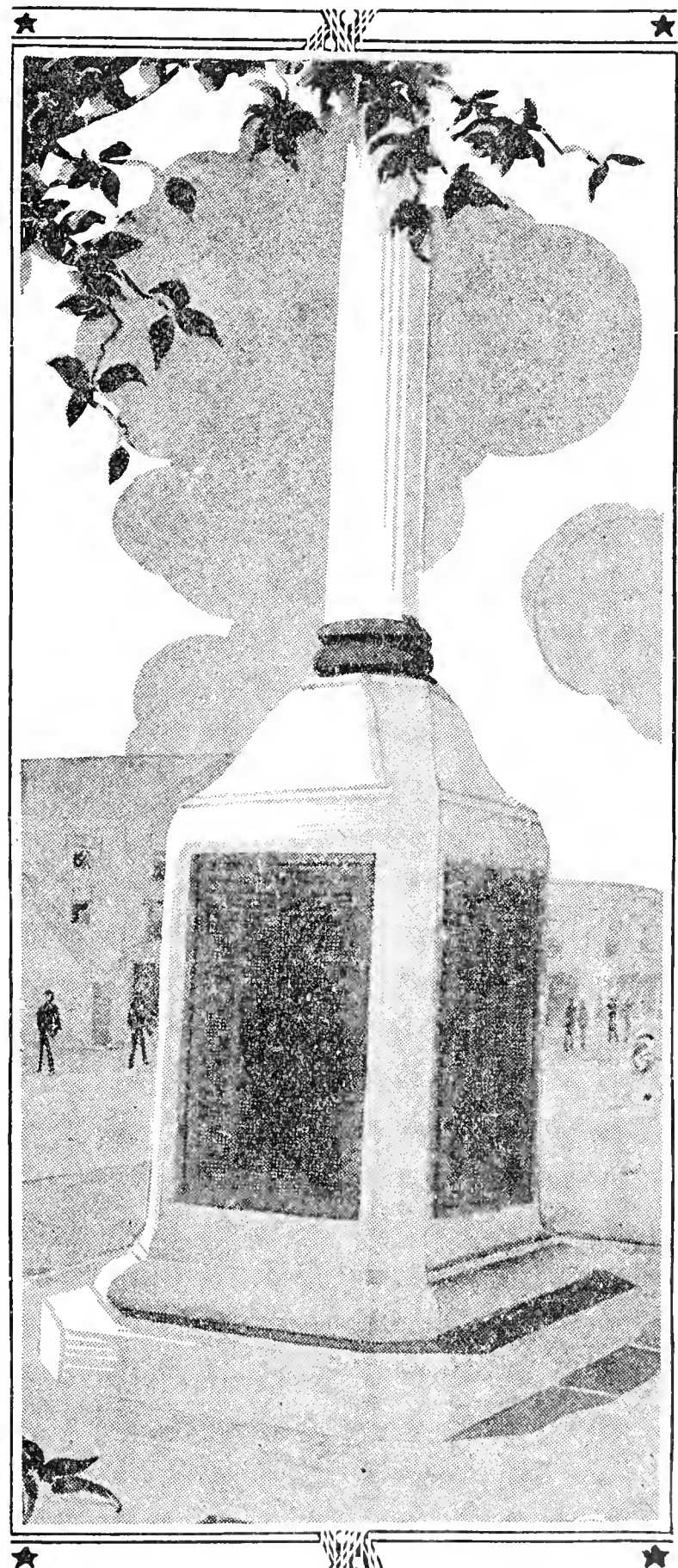
SPECIAL REGIONAL APPLE REPORT

	Condition.		Commercial crop % of		
	Aug., 1919	Final 1918	Aug., 1919	Final last 1918 year	
	%	%	Barrels	Barrels	
Western New York.....	21	75	1,344,000	4,800,000	28
Hudson Valley.....	45	37	788,000	647,000	121
Southern Ohio.....	23	72	184,000	558,000	33
Shenandoah-Cumberland district	46	65	2,024,000	2,600,000	78
Piedmont district.....	54	48	513,000	465,000	110
New England Baldwin belt.....	65	43	1,111,000	645,000	172
Western Michigan.....	42	59	541,000	760,000	71
Western Illinois.....	35	48	350,000	480,000	73
Southern Illinois.....	25	20	375,000	300,000	125
Ozark region.....	58	34	731,000	429,000	170
Missouri River region.....	42	30	924,000	630,000	147
Arkansas River region.....	43	42	129,000	123,000	105
Pacific Northwest.....	79	65	17,771,000	15,037,000	154
Colorado.....	65	43	1841,000	1527,000	160
California.....	87	79	11,253,000	11,127,000	111

¹To reduce to boxes, multiply by 3.

ONE HUNDREDTH ANNIVERSARY

The Peck, Stow & Wilcox Co., makers of the well-known Pexto lines, and community joined the last three days of August in Southington, Conn., in a remarkable observation of the 100th anniversary of the establishment of the nursery and mechanics' hand tool and tinnery's machine business.



THE SOLDIERS' MONUMENT.

Lyman H. Treadway, of Cleveland, president of the company, personally presented handsome gold or silver service badges to each of the 86 employees of the company who have seen service with the plant for 25 years and upwards. The 23 men who have been on the payroll for 40 years or more, were given gold badges, each engraved with his name and period of service (five of them

regulation provides for the importation under a special permit from the Secretary of Agriculture, of limited quantities of otherwise prohibited stock for the purpose of keeping the country supplied with new varieties of plants and stock for propagation purposes not available in the United States. This amendment, however, does not apply to a few plants which have been specifically prohibited entry under other quarantines, as, for example, pines, Ribes and Grossularia from certain countries, and citrus, banana, and bamboo stock.

The following explanations of regulation 14 are given to indicate the limitations under this regulation and the procedure to be followed in making importations of the two classes of plants specified, namely, new varieties and necessary propagating stock.

The expression "New Varieties" is understood to mean plant novelties, that is, new horticultural or floricultural creations or new discoveries.

"Necessary Propagating stock" is understood to mean stock of old or standard varieties imported for the multiplication of the plants in question as a nursery or florist enterprise as distinguished from importations for immediate or ultimate sale of the stocks actually imported, and such importations will be restricted to stocks which are not available in this country in adequate quantities.

The expression "Limited Quantities" used in regulation 14 is understood to mean with respect both to new varieties and to standard stocks, such quantities as will supply reasonable needs for the establishment of reproduction plantings which may be thereafter independent of foreign supplies.

There is no limitation as to the number of permits for different plants or classes of plants under regulation 14 which an individual may request, but the applications will all be passed upon both as to necessity for the particular importation and as to the quantity adequate for the purpose intended, by experts of the Department, for the information of the Board prior to the issuance of the permits.

All importations under regulation 14 must be made under special permits through the Office of Foreign Seed and Plant Introduction of the Department of Agriculture but for the use of the individual importer. The importer will be required to meet all entry, transportation and freight-handling charges. The Department will make no charge for inspection and supervision. The necessary procedure for making such importations is as follows:

1. The Federal Horticultural Board will supply, on request, an application blank upon which request may be made for a special permit to import. This application embodies an agreement on the part of the importer that if the imported material is found on examination by an inspector of the Department of Agriculture to be so infested or infected with insects or disease that it cannot be adequately safeguarded, it may be destroyed and such destruction will not be made the basis of a claim against the Department of Agriculture for damages. The application must be accompanied by a statement certifying that the plants to be imported are novelties or if standard varieties of foreign plants, that stocks in adequate quantities for their propagation are not available in this country, and that in either case they are to be imported for the establishment of reproduction plantings and not for immediate or ultimate sale of the stocks actually imported. In exceptional cases the importation of novelties may be made for personal use but not for sale. The application must also give the name and address of the exporter, country and locality where the stock was grown, the name and address of the importer and the name and address of the nursery or other establishment where the plants are to be planted and grown for propagation purposes on release.

2. If the permit is issued, the applicant will be furnished shipping instructions and shipping tags to be forwarded with his order to the exporter. The plants will, in consequence, be addressed in bond to the U. S. Department of Agriculture, Bureau

of Plant Industry, Washington, D. C., United States of America, and indorsed, "Foreign Seed and Plant Introduction, for (insert name of importer)", and arrangements must be made with some responsible agency in Washington for the clearance of the plants when received through the Custom House at Georgetown, D. C., together with the payment of all charges involved.

3. Upon clearance through the Georgetown Custom House the material will be turned over to the Office of Foreign Seed and Plant Introduction by the authorized agent of the importer, and in the specially equipped inspection houses and under expert care as to the welfare of the plants, be carefully examined by inspectors of the Federal Horticultural Board. If found free from dangerous insects or diseases, the shipment will be immediately and carefully repacked and forwarded by express or freight, charges collect, to the importer.

4. Should importers request permits covering the importation of larger quantities of propagating or other stock under regulation 14 than can be housed and cared for in the inspection houses of this Department, and should such request be approved, such importers may be required to provide local storage in Washington for such material during the period of detention for examination and, if necessary, disinfection. Where possible the original containers will be employed for repacking the material but the importer will be required to meet the cost of such repacking and of new containers when such are necessary. Small shipments which can be easily handled will be repacked without charge. For the present the Board will undertake on request to provide for such storage and repacking but reserves the right to require the importer to provide for such work through his own agents.

5. Cleaning and disinfection will occur for slight infestation, but should the material be found to be so infected or infested with either disease or insects that it cannot be so adequately safeguarded, it will either be destroyed, or, when possible and desirable, returned to the point of origin.

Yours very truly,

C. L. MARLATT

Chairman of Board.

NURSERYMEN WILL MEET IN DENISON SEPTEMBER 24-25

On September 24 and 25 there is to be a meeting in Denison that will prove of more than ordinary interest to nurserymen of that section. On those dates the Southwestern Nurserymen's Association will hold its annual meeting and a program is now being arranged for publication in the near future. The sessions of the association will be held in the Chamber of Commerce rooms.

Territory within the scope of the Southwestern Association includes the States of Texas, Oklahoma, Arkansas, Louisiana and New Mexico, all of which will be represented at the Denison meeting.

J. R. Westbrook, dairyman, farmer and horticulturist, who resides a few miles west of the city, will deliver the opening address on the morning of September 24, and will be followed by speakers of renown from various localities.

Will B. Munson, Denison nurseryman, speaking of the coming meeting, said he was expecting a good attendance from all the States included in the association and is looking forward to one of the best sessions in the history of the organization.

W. C. Reed & Sons, Vincennes Nurseries, Vincennes, Ind., report a very heavy demand and sales more than double. It is no longer a question of offering stock, but trying to hold back enough to take care of the regular trade in assorted lots.

Capt. H. P. Read, who formerly had charge of the field work, is again in harness, after two years in service, and has become an active partner, looking after the growing and propagation.

They have recently purchased 100 acres of the best nursery land adjoining the home place, and are planting 75 acres more to apple orchard. This with 85 acres already planted, made it important to secure more land to keep up their usual plant of nursery stock.

A HANDSOME CHINESE ROSE.

In 1804 a Rose reached England from China and when it flowered was found to have small, clustered, double pink flowers. It soon found its way to France and in 1821 received the name of *R. multiflora carnea*. Redoute made it the subject of one of his graceful Rose portraits in *Les Roses*, the most beautiful of the many books devoted to Roses. In 1817 another of the double red or pink flowered multiflora Roses was sent from China to England and then to France. This plant received there the name of *Rosa multiflora platyphylla* and its portrait was also painted by Redoute. It was called in England the "Seven Sisters Rose" and soon became a popular garden plant in Europe and the United States. Now it has almost disappeared from gardens, having been replaced by the Rambler Rose, which is now one of the most popular Roses in the northern United States, is evidently a selected form of *R. multiflora platyphylla* and has been widely cultivated in China probably for centuries. From China it reached Japan, and in 1878 came from Japan to England. *Rosa multiflora* itself, which is a Japanese species with large clusters of small white single flowers, has been known to botanists since 1784 but did not reach England until about 1875. Seeds of this Rose were sent, however, from Germany a year earlier to the Arnold Arboretum where it has been largely used in the production of hybrid Rambler Roses. Nothing was known of the origin of the double pink and red-flowered Chinese multiflora Roses until 1897 when a French missionary, the Abbe Farges, sent from western China to Monsieur Maurice L. de Vilmorin seeds of a Rose which turned out to be a single pink-flowered *R. multiflora*, and certainly the plant from which they had been derived. A portrait of this plant in flower appeared in 1904 in the catalogue of the Fruticetum Vilmorinianum, but it was not named and seems to have been lost sight of. Wilson found it in western China where it is very common, and collected seeds. William Purdom, also collecting for the Arboretum in Shensi in 1909, sent seeds to the Arnold Arboretum. This Rose is now to be called *R. multiflora*, var. *cathayensis*; it is a hardy, vigorous, and handsome plant with the habit of the Japanese *R. multiflora*. The flowers are from two to two and a half inches in diameter and are produced in large, many-flowered clusters, and the large, conspicuous, bright yellow anthers add to the beauty of the clear pink petals. This Rose may well become a popular garden plant. It offers possibilities which the hybridist will un-

doubtedly take advantage of; and it is of considerable historical interest as the wild original of garden plants cultivated probably for centuries by the Chinese and known in Europe and America for more than a hundred years.

Editor National Nurseryman:—

The ad. below, taken from "Life," might be used (with change of name and address) by a trade organization, whose annual meeting was held in Chicago the latter part of June. (Signed) "Reactionary."

PERSONS with any sort of idea, foolish notions, chimerical schemes, untried reforms, visionary theories and pet projects, can have them generously financed by addressing U. S. GOVERNMENT, Washington, D. C. P. S.—Would especially like to hear from the gentleman with the process for extracting sunbeams from cucumbers and the inventor of the method of lifting one's self by one's own boot-straps.

WANT A GOOD BUSINESS MAN TO HELP IN NURSERY.
Good man with experience and some money to help develop and carry on business. Good location. Nice business to commence with. Write us for particulars.

Webster, Parish Nursery, - Sibley, La.

500,000 California Privet
—Hardwood Cuttings—
1,000,000 Cal. Privet
250,000 Privet Amurensis
1,000,000 Shade Trees
1,000,000 Hardy Shrubs
100,000 Roses
Write for price list.
OAK LAWN NURSERY,
Huntsville, Ala.

We offer for fall shipment, Catalpa, Willow, Lombardy and Carolina Poplar, Oriental Plane, Silver Leaf Maple 8 to 14 ft. Spirea, Deutzia, Weigelia, Althea, Privets, Forsythia, Lilac, Crape Myrtle, Corral Berry, Spice Bush, Magnolia 2 to 5 ft.

CURETON NURSERIES, Austell, Ga.

We offer the following for late fall delivery

June Buds 6-12 in.	12-18 in.	18-24 in.	2-3 ft.	3-4 ft.
Elberta 4,000	4,000		10,000	3,000
Hiley			10,000	2,000
Carman		1,000	2,000	
Red Bird			1,000	
Mayflower			1,000	

500 bu. natural peach seed, 500,000 each Aroma and Klondike strawberry plants.
Chattanooga, Tenn. CHATTANOOGA NURSERIES.

 **SAITAMA-ENGEI & CO.**
Toyono Nr Kasukabe, Saitamaken, Japan
EXPORTER

Japanese Pear Seeds.
Japanese Pear Seeding. 2-16 3-16 4-16
Diospyros Kaki (Japanese Persimon) Several varieties.
Diospyros Kaki Seeding. (For grafting purpose.)
Pirus Toringo (Cutting for grafting apple.)
Larix Leptolepis Seed and Tree Seeds.
Wistaria Chinensis Seeds.

Large quantities special lowest prices on application.

AMERICAN FLORIST'S TRADE DIRECTORY
Price \$3.00, Postpaid
For Sale By
NATIONAL NURSERYMAN PUB. CO. Inc.,
HATBORO, - - - PA.

WANTED

ONE OF THE LEADING FIRMS at Boskoop, Holland with special culture of nursery-stock for the American market, ask sole Agency for the U. S. and Canada. Import House preferred.

Address Box 77, Care The National Nurseryman.

WANTED—Young man with some selling experience to call on the Florist and Nursery trade in the East and Middle West. Good opportunity open for the right party. State age, experience, references and salary expected. Address SALESMAN, National Nurseryman.

WANTED—Thoroughly reliable young to middle aged man, familiar with names and habits of ornamental trees, shrubs, evergreens and roses, with practical knowledge of Landscape work and a SALESMAN. A permanent position to the right man with reasonable salary and every chance for advancement.

DRUMM SEED & FLORAL CO.,

507 Houston Street

Ft. Worth, Texas

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co.
Hatboro, Pa.

Specialists in Nursery Printing

Ask for Prices.

We are the printers of this Magazine

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

Strawberry Plants

The leading standard and everbearing varieties. We are located in the largest strawberry center in the World and have the soil and climate to produce the best.

ASPARAGUS ROOTS

1 and 2 year No. 1.

Correspondence solicited.

Bunting's Nurseries, G. E. BUNTING & SONS

Selbyville—Delaware

Subscribers to "Nurserymen's Fund for Market Development."

FOR SALE

FOR SALE

Apple Trees 7-9 years old 1-2 inch, Standard Pears 4-7 years old, 1-1 3/4 inch Caliper; Plums, European and Japan 1-2 inch Caliper in carload or box lots. Reasonable Prices.

PATRICK O'HARA,
Dansville, N. Y.

ABELIA GRANDIFLORA

Nice lot of field grown, well branched stock. Three sizes, 12 to 18 in., 18 to 24 in., 2 to 3 ft. By the 100, 1000 or 10,000. Also some good 2 year Rosa Hugonis. Wanted, Azalea Indica; and for lining out Thuya Aurea Nana, Rosedale, Filiformis.

THOMASVILLE NURSERIES
THOMASVILLE - GA.

We will be pleased to make you prices on any of the following stock, well grown, well dug and well packed:

8000	Spirea Van Houtte	2-3 ft.
7000	Spirea Van Houtte	3-4 ft.
2000	Polish Privet	2-3 ft.
500	Purple Lilac (stocky)	3-4 ft.
1000	Lonicera Belle Albida	2-3 ft.
300	Golden Elder	2-3 ft.
200	Cornus Siberica	2-3 ft.
300	Snowball	2-3 ft.
	European White Birch Low branched	6-8 ft.
	Box Elder	6-8, 8-10, 10-12 up to 2 in.
	European Mt. Ash	5-6 and 6-8 ft.

The Coe, Converse & Edwards Co.

FORT ATKINSON, WIS.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myroblan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

HARDY PERENNIAL PLANTS

Phlox, Iris, Delphiniums, Shasta Daisies and many other perennials. Send us your want list for prices or ask us for wholesale price-list.

WILLIAM TOOLE & SON,
Hardy Plant & Pansy Farm,

Earaboo

Wisconsin

STRAWBERRY PLANTS

Summer and Fall bearing varieties, shipped to you or direct to your customer under your tag.

Plants and service that pleases both you and your trade.

Let us quote you

V. R. ALLEN,

59 Lane Avenue

Seaford, Del.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

E. Turbat & Co., Nurserymen ORLEANS, - France

We have the pleasure to advise the American Nursery Trade that our New WHOLESALE CATALOGUE will be posted to any Nurseryman in the U. S. A. who will apply for it.

Our catalogue is as much complete and as much interesting as it was previously but we cannot this season incur the great expense of posting it to all the nurserymen of the United States of America without a special demand for the following reasons:

1st. We are very short of fruit and Rose Stocks which will be sold out early.

2nd. We have a superb assortment of:

Young deciduous and Evergreen, Ornamental & Forest Trees, Shrubs, Hardy Herbaceous, etc.

New Rare or Noticeable Trees and Shrubs and Hardy Herbaceous New and Rare Rose Trees

which are prohibited at the entry in the U. S. A. if destined for selling at once, but which are allowed to enter if they are destined for the propagation work, and if the importer has obtained permission from the Federal Horticultural Board at Washington.

We are at the full disposition of the Nurserymen or Florists of U. S. A. who desire to buy these articles and we will be very pleased to answer their demand re: catalogues and general information.

**E. TURBAT & CO., Nurserymen
Orleans, - France**

Apple, Pear, Plum and Cherry Trees

1, 2, 3, 4, and 5 years old. All the leading varieties. We have some fine specimens in our four and five year trees as large as 2½ inch in caliper. Some Varieties are ready to bear fruit. These large trees can be successfully transplanted and those who offered them last year had wonderful success with them and made big profits on them. For the Home where only a few trees are planted these large trees are just what you want to offer your Customers. They are fine looking trees when received—they will live and bear fruit early and they will help build up your trade and bring you in big profits. We have found a smaller per cent of loss in planting these large trees than in planting the two year tree. Put a page or two of these bearing size trees in your Catalog this year—We predict it will bring you in the best returns for the space. Those selling through Agents will find these large trees a leader.

Send us your list of wants and write us about the big tree.

**THE HOME NURSERIES, INC.
DANSVILLE - NEW YORK**

TULIPS

PEONIES

IRISES

Peonies.—Standard varieties. Also singles and light-weight doubles adapted to ornamental planting.

Tulips.—Cottage and Darwin in standard varieties and in mixtures. Also small planting sizes of Cottage and Darwin mixtures, Wedding Veil, White Queen, Kate Greenaway, Clara Butt, Bouton d'Orr and others.

Irises.—Siberian in blue, white, and purple. Write for prices by the bushel or barrel of German Florentina, Flavescens, Kochii, Mad. Chereau, Gazelle.

ORONOGO FLOWER GARDENS,

CARTERVILLE

MO.

Scarcity of Stock

makes our offer of choice shade trees and shrubs

Interesting Reading

We offer in assorted sizes Norway and Sugar Maples, Horse Chestnut, Catalpa Bungei, European Sycamore, American Elm.

In shrubs Althea, both bush and tree shape; Cornus Siberica; Deutzias; Hydrangea P. G.; Kerria Japonica and Japonica Variegated; Philadelphus assorted; Prunus Pissardi; Golden Elder; Spirea Opulifolia Aurea, Thunbergii and Van Houtte.

In evergreens Douglas Spruce, White Spruce, Norway Spruce; White and Scotch Pine; Retinospora Picifera and Picifera Aurea, Plumosa and Plumosa Aurea; Arbor Vitae Columbia, Compacta, Ellwangeriana, Lutea, Siberica and Siberica Lutescens.

W. B. COLE
Painesville - - Ohio

REINHOLD UNDRITZ WEST NEW BRIGHTON, N. Y.

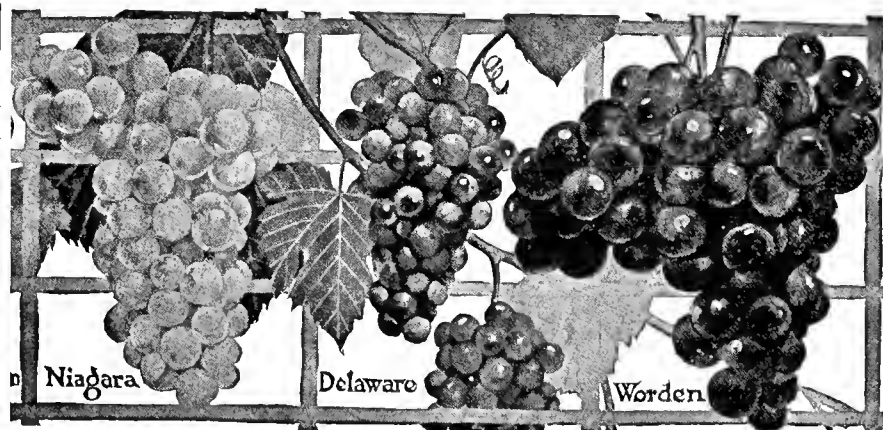
offers three new, beautiful hardy climbing roses, hybridized by Fred'k R. Undritz and registered by the American Rose Society, viz:

VICTORY—Light pink, double.

FREEDOM—The climbing White American Beauty; white, large, double, seventy-five petals in flower.

FRED'K R. UNDRITZ—Dark pink, large, double. About a thousand of the above named 1 and 2 yr. old plants and a thousand of each 2½ in. stock now ready for sale.

Besides the above named are nineteen other tested hybrid seedlings produced by the same hybridizer and a few hundred young plants. Special attention of nurserymen is called to No. 15, Madame Levavasseur X Grussan Teplitz, very early flowering, bearing blooms about three weeks earlier than Crimson Rambler, thus making it suitable for Easter forcing. The flowers, a mass of brilliant dark red are single and have good lasting qualities. About a hundred 2 and 3 yr. old plants. 2-5 ft. high. All these for sale at reasonable prices.



T. S. HUBBARD CO.
Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting

Established 1866

Send for Catalogue

When writing to Advertisers please mention the National Nurseryman.

Surplus List of NURSERY STOCK

Grown at Our Nursery in Western Springs, Illinois.

We should be pleased to show this stock to any one interested in the following list.

PRICES ON APPLICATION

		Height, feet	Caliper, inches
800	American Ash	7—8	1
1000	American Ash	10—12	1½—2
500	Catalpa Kaempferi	6—7	
250	Catalpa Kaempferi	10—12	1½—2
1600	Catalpa Speciosa	8—10	1½—2
2000	Elm—American	6—7	
600	Elm—American	10—12	1½
1000	Elm—American	10—12	2
800	Elm—American	12—14	2½
100	Elm—American	14—16	6—10
300	Elm—English	12—14	3
200	Elm—English	12—14	3½
350	Elm—English	15—16	4
350	Elm—English	15—16	4½
350	Elm—Scotch	10—12	1½
350	Elm—Scotch	10—12	2
300	Elm—Scotch	12—14	2½
150	Elm—Scotch	12—14	3
150	Elm—Scotch	16	3½
250	Elm—Scotch	16	4½
200	Elm—Scotch	16	5

These English and Scotch Elms are extra fine stock—uniform “gunbarrel” stems, bushy, symmetrical heads. The best variety for city, estate and avenue planting—is recommended by the Arnold Arboretum as being better adapted for city conditions than the American Elm. This is transplanted layer stock and suitable for private estates, park planting and the highest class of retail trade. Inspection invited.

For other Elms, see our Fall catalog.

		Height, feet	Caliper, inches
500	Honey Locust	6—7	
600	Honey Locust	8—10	
250	Maple Norway	8—10	1½
300	Maple Norway	8—10	2
250	Maple Norway	8—10	2½
200	Maple Norway	12—14	3
160	Maple Norway	12—14	3½
150	Maple Norway	12—14	4
125	Maple Schwedleri	12—14	2
125	Maple Schwedleri	12—14	2½
600	Maple—Silver	6—8	
600	Maple—Silver	10—12	
500	Platanus Orientalis Accrifolius	8—10	1—1½
150	Platanus Orientalis Acerifolius	8—10	2—2½
150	Populus Bolleana	6—7	
250	Populus Bolleana	7—8	
500	Populus Carolina	12—14	1½—2
500	Populus Carolina	12—14	2—2½
2000	Populus Lombardy	6—8	
4000	Populus Lombardy	8—10	
1000	Populus Lombardy	10—12	
4000	Populus Lombardy	12—15	
200	Walnut Sieboldi	5—6	
200	Walnut Sieboldi	7—8	

VINES

		Age
500	Wistaria Magnifica	2 years
1000	Wistaria Magnifica	3 years
1000	Wistaria Magnifica	4 years

SHRUBS

		Height
250	Berberis Illicifolia Specimens	1½—2
250	Berberis Illicifolia Specimens	2½—3
250	Berberis Thunbergii Specimens	3—3
250	Crab—Bechtel's Dbl. Flg.—Specimens ..	6—7
800	Cydonia Japonica Specimens	3—4
250	Cydonia Japonica Specimens	4—5
300	Deutzia Pride of Rochester Specimens ..	2—3
300	Deutzia Pride of Rochester Specimens ..	3—4
250	Deutzia Pride of Rochester Specimens ..	4—5
50	Eleagnus Angustifolia Specimens	3—4
200	Eleagnus Angustifolia Specimens	5—6
100	Eleagnus Angustifolia Specimens	10—12
1500	Forsythia Intermedia Specimens	3—4

SHRUBS—Continued

		Height
250	Ligustrum Iboata Specimens	4—5
400	Lonicera Tartarica Rosea	3—4
400	Lonicera Tartarica Rosea Specimens ...	4—5
200	Malus Floribunda	3—4
150	Malus Niedwetskiana	6—7
600	Philadelphus Grandiflorus	3—4
250	Philadelphus Grandiflorus	4—5
1000	Rhamnus Catharticus	4—5
1500	Rhamnus Catharticus	5—6
500	Rhamnus Catharticus	6—7
150	Ribes Alpinum Specimens	3—4
250	Rosa Rubinosa (Sweet Briars)	4 years
1000	Salix Discolor (Pussy Willow)	3—4
2500	Salix Discolor (Pussy Willow)	5—6
100	Sambucus Aurea Specimens	6
1000	Spirea Opulifolia	4—5
500	Spirea Opulifolia Specimens	5—6
2000	Spirea Van Houttei XXXX	2—3
7000	Spirea Van Houttei XXXX—Extra Bushy Stock	3
200	Syringa Japonica—Tree Form	3—4
200	Syringa Marie Legraye—Bushy	3—4
200	Syringa Michael Buchner—Bushy	3—4
4000	Syringa Vulgaris Purpurea	3—4
2000	Syringa Vulgaris Purpurea	4—5
1200	Syringa Vulgaris Purpurea	5—6
100	Tamarix Hispida Aestivalis	3—4
600	Tamarix Amurensis	2—3
2500	Tamarix Amurensis	3—4
800	Tamarix Amurensis	5—6
250	Viburnum Opulus—Specimens	5—6

EVERGREENS

		Height feet
30	Abies Brachyphylla	4—5
200	Juniperus Communis Hibernica	3—3½
50	Juniperus Japonica	2x2
25	Juniperus Pfitzeriana	7
25	Juniperus Pfitzeriana	8
75	Juniperus Virginiana Glauca	3
75	Juniperus Virginiana Glauca	4
50	Juniperus Virginiana Elegantissima	3½—4
100	Picea Excelsa	2—2½
100	Picea Excelsa	3—4
50	Picea Pungens Glauca Kosteriana	3
50	Picea Pungens Glauca Kosteriana	6
50	Picea Pungens Glauca Kosteriana	7
50	Picea Pungens Glauca Kosteriana	8

This stock is extra fine, grafted and transplanted stock. We also have a quantity of select specimens, ranging from 10 to 13 feet. Quotations on request.

1000	Thuya Occidentalis	2½
1000	Thuya Occidentalis	3
50	Thuyopsis Standishi (Japanese Arbor Vitae)	3—4

APPLE TREES

Since we grow these fruit trees solely for our retail trade, the quality is vastly superior to stock ordinarily offered by Nurserymen. These trees are just what the better class of retail customers require.

		Height feet
100	Autumn Strawberry	6—7
50	Autumn Strawberry	7—8
35	Banana	8—10
50	McIntosh Red	7—8
50	McIntosh Red	8—10
50	North Western Greening	7—8
50	Rome Beauty	6—7
100	Salome	7—8
35	Spitzenburg	7—8
100	Wagener	8—10
50	Winesap	6—7
50	Winesap	7—8
50	Wolf River	7—8
50	Wolf River	8—10

CHICAGO
31-33 West Randolph Street

VAUGHAN'S SEED STORE

NEW YORK
41-43 Barclay Street

GREENHOUSES, NURSERIES AND TRIAL GROUNDS, WESTERN SPRINGS, ILL.

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials.

Send us your want list.

Inspect our stock.

The Gardeners' Chronicle

(Established 1841)

The BEST and OLDEST horticultural paper in England. Price 4d per week.

Send for free copy and subscription rates to:—

The Publishers, 41 Wellington St.
W. C. 2, London, England

THE FLORISTS' EXCHANGE

EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address
The Florists' Exchange, P. O. Box 100, Times Square Sta.

ALL "AMERICAN NURSEYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.

147 Summer St. Boston, Mass.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries	Currants	Rhubarb
Raspberries	Gooseberries	Asparagus
Blackberries	Grape Vines	Horseradish
Dewberries	Privet	Hardwood Cuttings
Berberry	Spirea	Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE OHIO

A Large Stock of

Apple, Pear, Cherry and Peach Grape Vines, Blackberry and Raspberry Plants

And a general line of ORNAMENTAL TREES and SHRUBS. All stock clean and thrifty, the best that can be grown.

T. B. WEST, Perry, Ohio.

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND VIRGINIA

SURPLUS FOR SPRING 1920

Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; California Privet, 2, 3, and 4 years; Sugar Maple Seedling, six inches to ten feet.

Write for Prices

TO THE TRADE ONLY

We offer a general assortment of Nursery stock, and Nursery supplies, including—

A few thousand Vrooman

FRANQUETTE AND MAYETTE WALNUTS,
both grafted, and seedlings from grafted trees,
and

BARCELONA AND DU CHILLY FILBERTS

Portland Wholesale Nursery Co.

122 1/2 GRAND AVENUE PORTLAND, OREGON

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries
North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

When writing to Advertisers please mention the National Nurseryman.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.



NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and
PRINTED IN ANY MANNER that may be called for

*Prices as low as First-Class Work and Unequalled Promptness in
Delivery will justify.*

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

ATTENTION!

We are now offering our usual brands of

RAFFIA

Best Quality—

—Lowest Prices

Price List mailed on request.

Thomas B. Meehan Co.

DIRECT IMPORTERS

Dresher - - Penna.

Subscribers to "Nurserymen's Fund for Market Development."

TRADE PRICES TO THE TRADE ONLY

The report of the Committee on Policy resulted in the adoption of the following resolution—

Recognizing the great diversity of interests of the members of the National Association of Nurserymen, we offer recommendations only on such questions where the interests of all converge, and where in the silence of the Association the interests of all would suffer.

Realizing the necessity of keeping open and profitable, the outlets for the distribution of nursery stock as fundamental to the success of the industry, therefore, be it

Resolved. The members of the American Association of Nurserymen shall not sell to any consumer of nursery products, whether private owners, parks, cemeteries, realty developments, municipalities, department stores, or other large buyers at prices which do not adequately protect in his sales and distribution expenses, the nurseryman who buys similar stock to sell again, and

Whereas: The professional landscape architect buys only as an agent, for his client, the planter, therefore be it resolved.

That we disapprove of nurserymen giving their wholesale trade lists or trade prices to or through professional landscape architects.

Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

Write for our List

Cannas, Dahlias and Gladioli

C. BETSCHER, Dover, O., U. S. A.

When writing to Advertisers please mention the National Nurseryman.

Harrisons' Barberry Thunbergii

The plants we have to offer are up to our usual high standard, well-branched, bushy, with an abundance of fibrous roots,—the kind that will live and thrive.



10,000	12 to 18 inch
50,000	18 to 24 inch
50,000	2 to 2½ ft.
25,000	2½ to 3½ ft.

If you are in need of a large quantity of Barberry it will pay you to visit our Nurseries.
WE INVITE INSPECTION.

A complete list of our offerings will be sent promptly upon request.

HARRISONS' NURSERIES,
Nurserymen *Orchardists*
BERLIN, MARYLAND

Subscribers to "Nurserymen's Fund for Market Development."



THE NATIONAL NURSERYMAN



OCTOBER 1919

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa

Our Specialty

A large assortment of high quality Nursery
Stock for the Wholesale Trade.
Fruit Trees, Small Fruits, Ornamental Trees,
Shrubs, Roses, and Vines.

A FINE LOT OF

Elm, American White, all sizes

Wanted — Hansen Hybrid Plums and Compass

Ask for Trade Lists. Write us about your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants Everbearing and Standard

From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company

Strawberry Specialists,

Salisbury, - Maryland

Subscribers to "Nurserymen's Fund for Market Development."

Be a regular Customer, for we have a complete line of stock grown and cultivated to the highest standard, for a particular retail trade.

C. R. BURR & CO.
Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock



MODESTY

forbids our trying to adequately describe what a nice lot of stock we have for delivery this season. The growing season has, in the main, been a very favorable one and most lines of stock have made very satisfactory growth. Prices are high, —the highest we can remember,— but we hope to deliver a quality of stock which is correspondingly high.

Write us about any of the following articles,—or about **anything** you are needing. If we haven't it, maybe we can "put you next."

CLIMBING ROSES,
CLEMATIS PANICULATA,
CLIMBING VINES,
FLOWERING SHRUBS,
LILACS,
AMPELOPSIS VEITCHII
HERBACEOUS PERENNIALS,
PAEONIAS,
ORNAMENTAL TREES,
EVERGREENS.

Our fall trade-list was mailed out Sept. 14th. Did you receive a copy? If you did not and are "in the trade" we would like you to have one and to place your name on our mailing list. Please use printed stationery when writing, though, or enclose business card. For our customers' protection, we send our lists only to "the trade."

Jackson & Perkins Company
Newark, - New York

The
Preferred
Stock

The
Preferred
Stock

THE BEST IN NURSERY PRODUCTS

EVERGREENS

ARBOR VITAE AMERICAN, Compacta, Conica Densa, Globosa, Hovey's Golden, Pumila and Pyramidalis. Box pyramidal and bush form. Fir, Balsam, Cephalonian, Concolor, European Silver and Nordman's. Juniper Alpina, Cracovian, Irish and Sabina. Pines, Excelsa, Mugho, Scotch and White. Retinispora Argentea, Filifera, Filifera Aurea, Liptoclada, Lycopodoides, Obtusa Aurea, Pisifera, Pisifera Aurea, Plumosa, Plumosa Aurea and Squarrosa Veitchii. Spruce, Hemlock, Norway, Oriental, Polita, Pyramidal and White. Yew, Cuspidata and Elegantissima.

Apples, Pears and Cherries, Deciduous Trees,
Shrubs, etc.

Send us your list of wants

HOOPES, BRO. & THOMAS COMPANY
THE WEST CHESTER NURSERIES

West Chester, Pa.

Established 1853

Incorporated 1907

BAY TREES

STANDARDS, 30, 40, 44, 48 inch crowns

PYRAMIDS, 6 ft., 6-7 ft., 7 ft., 8 ft.

SHORT STEMS in 6 sizes

BUSH SHAPE, 24 in. high, 15-18 in. diam.

Ready to ship now in tubs.

RAFFIA

A. A. West Coast Brand

XX Superior Brand

Red Star Brand

Bale lots or less

Prompt shipment.

Reduced Prices.

HARDY JAP. LILY BULBS

Auratum, Rubrum, Album,

Melpomene, Magnificum, etc.

Late Fall shipment.

Bamboo Canes

Dutch Bulbs

Paeonies, etc.

Write for prices, etc.

McHUTCHISON & CO.

95 Chambers St.

New York

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

COLLECTORS OF TREE SEEDS

THE
North-Eastern Forestry Co.

CHESHIRE
...Connecticut...

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

PAINESVILLE NURSERIES



Hydrangea P. G. is one of the showiest items of nursery stock now in the field, and we have a splendid lot of them in prime condition. All kinds of stock have grown well, and will dig largely in first grades.

There is no denying the fact, however, that all kinds of Nursery products are deplorably scarce, and we nurserymen are all sitting up nights trying to figure out how we can get by.

There will be no such word as "Surplus" used in nursery circles this winter.

What stock **The Painesville Nurseries** have to wholesale this fall, we are going to distribute as equally as possible among our patrons according to time of receipt of orders,—and "devil take the hindmost!"

Let us know your "wants" as early as possible.

The Storrs & Harrison Co.
Painesville, Ohio



Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

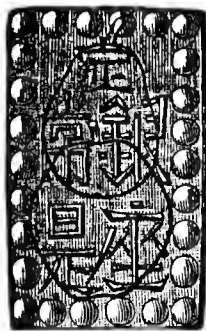
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

SHRUBS SHADE TREES EVERGREENS

Good assortment. Excellent quality.
All our own growing.
Fall trade list now ready. Ask for your copy.

HUNTSVILLE WHOLESALE NURSERIES
HUNTSVILLE, ALA.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS
EVERGREENS PEONIES PHLOX
and
HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY
GENEVA, N. Y.

73 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

*Our usual general assortment
of Nursery Stock to offer
for Fall 1919*

APPLE
PEACH
CHERRY
PLUM
SHRUBS
VINES, Etc.

Head quarters for Norway Maple
and American Elm.

C. M. Hobbs & Sons
Bridgeport, - Indiana

Subscribers to "Nurserymen's Fund for Market Development."

NEW ROSE STOCK.

**Rosa Multiflora Japonica
Seeds or Seedlings**

Two years ago we introduced this new Rose stock to the trade from Japan. Those who are using it pronounce it superior to Manetti or Multiflora for budding purposes. We can supply seeds, also a limited number of seedlings for Nov.-Dec. delivery which we had grown for us. Write for prices and particulars.

McHUTCHISON & CO., The Import House

No. 95 CHAMBERS STREET, NEW YORK



BEEMAN
1 HORSE TRACTOR

It Plows, Cultivates, Harrows,
Mows, Does 1 horse work at
½ horse cost. Successfully
operated by unskilled la-
bor. Thousands of
pleased users. Does
not pack ground.
Turns sharp cor-
ners, goes
close to fen-
ces. Use-
ful the
yr. ar-
ound

**The Original
Garden Tractor**

also a 4 h. p. gas engine
that operates pumps,
washing machine, cream
separator, churn, grinder
and does other belt work.
Moves from one job to an-
other under its own power.

\$285

f. o. b. Write for interesting
Factory free booklet giving full in-
formation.

Beeman Garden Tractor Co.
357 Sixth Avenue
South Minneapolis, Minn.

Ornamental Nursery Stock

**TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS PLANTS**

Large assortment. Long list of varieties and sizes
Get our New Trade Catalogue,—ready September.

Spring price list out of date.

Thomas B. Meehan Co.
WHOLESALE NURSEYMEN,

DRESHER PA.
Subscribers to "Nurserymen's Fund for Market Development."

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

We offer the following for late fall delivery

	June Buds 6-12 in.	12-18 in.	18-24 in.	2-3 ft.	3-4 ft.
Elberta	4,000	4,000		10,000	3,000
Hiley				10,000	2,000
Carman			1,000	2,000	
Red Bird				1,000	
Mayflower				1,000	

500 bu. natural peach seed, 500,000 each Aroma and Klondike strawberry plants.
Chattanooga, Tenn.

CHATTANOOGA NURSERIES.

F. & F. NURSERIES
Springfield, N. J.

Our SPECIALTY

Growing evergreens for lining out on contract.

CHAMPION NURSERIES, Perry, Ohio

Offer the Following Stock

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6. to 8 ft., 8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4 ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet, California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio



SAITAMA-ENGEI & CO.

Toyono Nr Kasukabe, Saitamaken, Japan
EXPORTER

Japanese Pear Seeds.
Japanese Pear Seeding. 2-16 3-16 4-16
Diospyros Kaki (Japanese Persimon) Several varieties.
Diospyros Kaki Seeding. (For grafting purpo. e.)
Pirus Toringo (Cutting for grafting apple.)
Larix Leptolepis Seed and Tree Seeds.
Wistaria Chinensis Seeds.

Large quantities special lowest prices on application.

IBOLIUM THE NEW HYBRID HARDY PRIVET
THE ELM CITY NURSERY CO. Woodmont Nurseries, Inc.
Introducers of BOX-BARBERRY NEW HAVEN, CONN.

(L. Ibota x Ovalifolium) Now sent out for the first time.
See page advertisement in this issue page 281.
One year field grown plants Inquire for further information.
Summer rooted frame grown Nov. 25th delivery

When writing to Advertisers please mention the National Nurseryman.

Vincennes Nurseries, W. C. REED, Prop.
VINCENNES, - - INDIANA

Cherry 2 Year Usual Supply.

Demand very heavy no more Car lots to offer, can furnish limited amounts in assorted Orders.

Cherry, One Year

Thrifty and nice, will only dig limited number. Not as heavy as usual owing to cold April. Will make excellent two year. Prefer to carry over if our customers will let us.

Peach, One Year

Limited amount in assorted Orders only.

Apple 2 Year

General List Leading Varieties in limited quantity.

Hardy Nut Trees

Grafted and Budded Pecans, English Walnuts and Grafted Black Walnuts in the best Varieties.

Trade List now ready.

Subscribers to "Nurserymen's Fund for Market Development."

FAIRFIELD NURSERIES
FRUIT AND SEED FARMS

I have sold all the stock I will have this Spring, but this Summer I will be ready to book orders for Fall, 1919 and Spring 1920 delivery.

The war is over and good times are ahead. No more guns or ammunition will be needed, but you will want more of my Grape Vines, Scarlet and Crimson clover and Cow-Peas than ever before.

Keep me in mind.

CHAS. M. PETERS

P. O. Address Salisbury, Wicomico County, Maryland.
Long Distance 'Phone and telegraph, Salisbury, Maryland.

Hill's Evergreens

SINCE 1855

Complete stock of leading varieties in Firs, Spruce, Pines, Arborvitae's, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

The D. Hill Nursery Co., Inc.

Evergreen Specialists.

Largest Growers in America.

Box 401, Dundee, Illinois

THE WESTMINSTER NURSERY
J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Fall 1919

250,000 Cal. Privets in grades, 1, 2, and 3 yrs.

300,000 Asparagus, 2 and 3 yr., Asst.

Barberry Thun., 18-24 in. and 2-3 ft.

Lombardy Poplars in grades 6 to 16 ft.

Oriental Planes in grades 6 to 12 ft.

Tulip Poplars, 6-8 ft.

Horse Chestnuts in grades 7 to 12 ft.

Catalpa Speco in grades 8 to 12 ft.

Butter Nuts 4 to 8 ft., in grades.

Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft., Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft. and 4-5 ft., Hydrangeas P. G., 2-3 ft. Write for Prices.

Willowdale Nurseries
KENNETT SQUARE, PA.

WE OFFER FOR FALL 1919

100,000 Privet in sizes from 2 to 5 ft.

Oriental Planes, American Elms.

Norway, Sugar, Sycamore and Silver Maples.

Pin and Red Oaks.

American, European and Silver Linden.

White Dogwood, Horse Chestnuts and Lombardy Poplars.

Salisburias and Tulip Trees.

Butternuts, Filberts, Walnuts and Pecans.

Evergreens and Shrubbery in good assortment.

Have many large Shade Trees in caliper from 3 to 8 inches.

Send list of wants for prices.

THE RAKESTRAW-PYLE CO.

KENNETT SQUARE

PA.

Small Fruit Plants
and Shrubbery for the
Wholesale Nursery
Trade.

P. D. BERRY & SONS

Dayton

Ohio

We are now ready to quote lowest prices on
FRUIT, SHADE AND ORNAMENTAL
TREES, SHRUBS, EVERGREENS,
VINES and HERBACEOUS
PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With
HYDROCYANIC ACID GAS
"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.

100 William St.

New York, N. Y.

PEX

TOOLS

FOR USE ABOUT THE HOME AND FARM
FOR THE MECHANIC IN EVERY TRADE



Sell More Nursery Stock

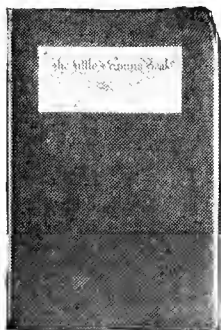
This Book and Plan Will Help You

Take care of your old customers but *keep adding new ones*. It's the only way to show a healthy increase in business and profits each year.

The Little Pruning Book offers the solution. It is an authoritative guide to correct pruning. Illustrates and explains how, when, and where, to prune for bigger and better fruit, flowers and plant life in general. Familiarize more customers with the fundamentals underlying the art of pruning and greater interest and more purchases will result.

The Plan Behind the Book

This Book Sells in Book Stores for 50 Cents



Our selling plan increases *your* profits by placing *The Little Pruning Book* in the hands of your customers *through you*. Your sales of nursery stock will increase as a matter of course.

Sending for a free volume does not obligate you in any way. It will bring you details of our cooperative plan of distributing this educational work, through nurseries. The author of this book, F. F. Rockwell, is now manager of the Nurserymen's National Service Bureau.

THE PECK, STOW & WILCOX COMPANY

Mfrs. Mechanics' Hand Tools, Tinsmiths' and Sheet Metal Workers' Tools and Machines, Builders' and General Hardware.

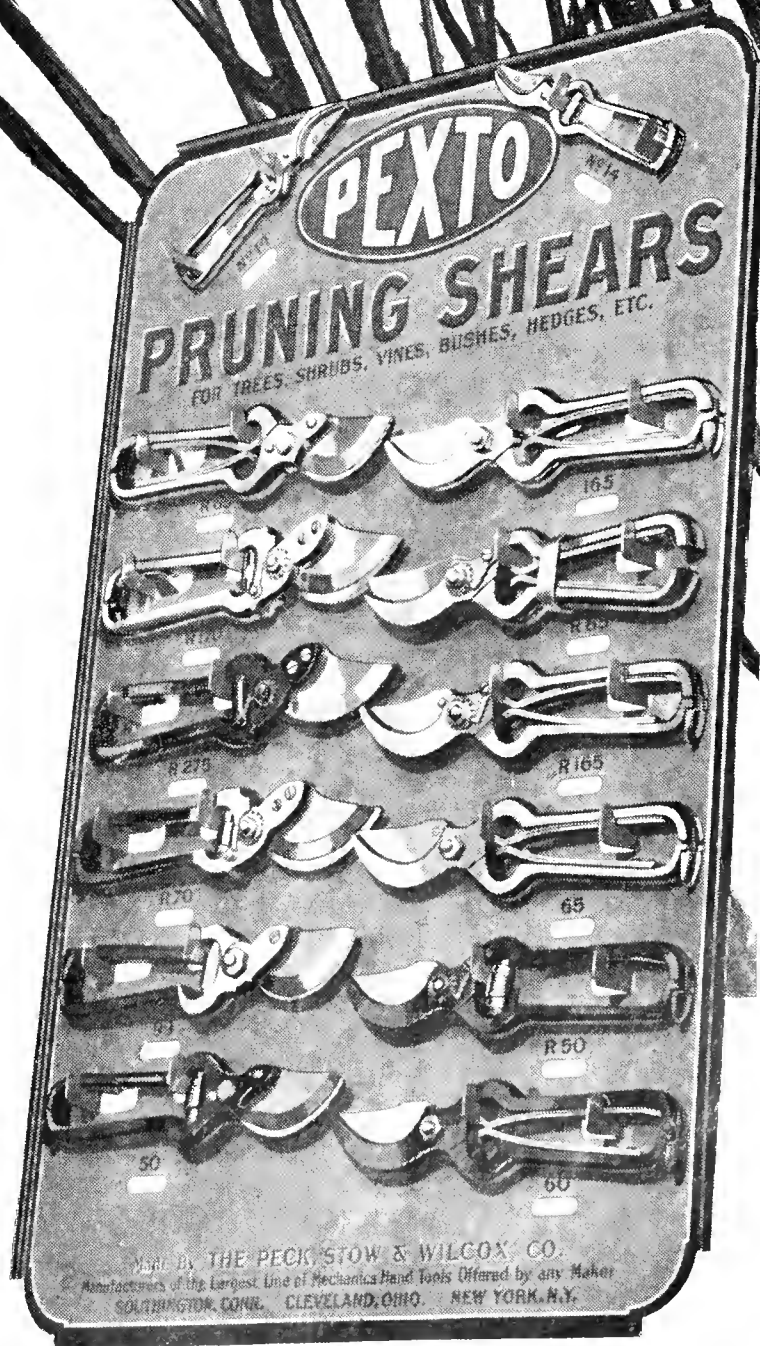
Southington, Conn.

Cleveland, Ohio

Address correspondence to 2189 W. Third St., Cleveland, Ohio

100% American for 100 years.

Founded in 1819



When writing to Advertisers please mention the National Nurseryman.

Princeton Products are Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

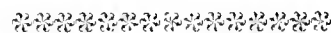
October First

1919

Scarcity of Stock

makes our offer of choice shade trees and shrubs

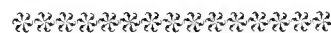
Interesting Reading



We offer in assorted sizes Norway and Sugar Maples, Horse Chestnut, Catalpa Bungei, European Sycamore, American Elm.

In shrubs Althea, both bush and tree shape; Cornus Siberica; Deutzias; Hydrangea P. G.; Kerria Japonica and Japonica Variegated; Philadelphus assorted; Prunus Pisardi; Golden Elder; Spirea Opulifolia Aurea, Thunbergii and Van Houtte.

In evergreens Douglas Spruce, White Spruce, Norway Spruce; White and Scotch Pine; Retinospora Picifera and Picifera Aurea, Plumosa and Plumosa Aurea; Arbor Vitae Columbia, Compacta, Ellwangeriana, Lutea, Siberica and Siberica Lutescens.



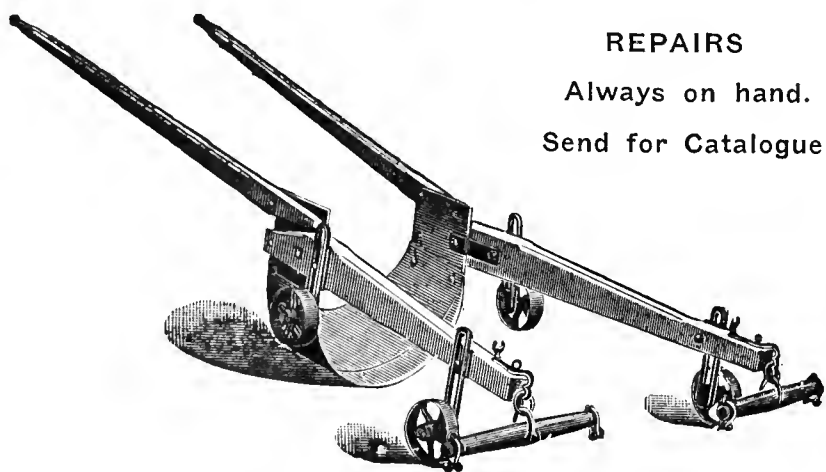
W. B. COLE

Painesville - - Ohio

1857

1919

BRAGG'S COMMON SENSE TREE DIGGER



REPAIRS
Always on hand.
Send for Catalogue

Digger gets All the Roots at the rate of Twenty to
Forty Thousand trees per day, and only
needs same power as plow.

L. G. BRAGG & CO.

KALAMAZOO, MICH.

Are You Troubled

with lost or "astray" shipments of nursery stock,
to say nothing of other difficulties experienced
through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it
up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a
reputation for giving you "what you want when
you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

West Chester, Pennsylvania

When writing to Advertisers please mention the National Nurseryman.

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSEYSTOCK
The National Nurseryman Publishing Co., Incorporated

Vol. XXVII.

HATBORO, PENNA. NOVEMBER 1919

No. 10

ACTIVITIES OF THE NATIONAL ASSOCIATION

The members of the American Association of Nurserymen have been attracted by the following notice sent out on Sept. 15th.

Morrisville, Pa., Sept. 15th, 1919.

To the Members of the American Association of Nurserymen:

This letter is to announce that John Watson, a former president of the Association, and a man known personally to most of you, has been persuaded to accept the position of Executive Secretary, and has already taken over the conduct of the business of the Association.

Mr. Rockwell retired from the management of the Market Development movement Sept. 1st, and the office maintained by him in New York is discontinued. Mr. Watson, who from the first has been a promoter of this movement and who in consequence is familiar with it, has assumed its management.

Curtis Nye Smith severed connection with the Association July 1st. A Credit and Collection service, similar to that maintained by him will, through an arrangement with the United States Fidelity and Guaranty Company, be available to members from Mr. Watson's office. Legislative matters will be passed upon by a representative and active committee, which Mr. Watson will assist whenever possible. His proximity to Washington will be an advantage in this.

Mr. Sizemore now becomes Assistant Secretary and Traffic Manager, though for the present his duties will remain substantially as before.

New ways for your Association to be of service will open under Mr. Watson's management, and the membership will be kept informed.

Your officers feel fortunate in having secured Mr. Watson and are confident the appointment will be popular with members generally, as Mr. Watson is recognized as a leader among us with progressive, profitable ideas for the advancement of the nursery industry.

Address John Watson, Executive Secretary, American Association of Nurserymen, 400 Nassau St., Princeton, N. J.

We want the membership to back Mr. Watson up actively—to use his office freely, and, if you like, confidentially, for in accepting this position all interests heretofore held by him in any nursery enterprise have been relinquished.

Very respectfully,
J. EDWARD MOON,
President.

Many among the membership knew that Mr. Watson had been asked to accept this important office, and had written urging his acceptance. This persuasion on the part of the membership, together with President Moon's frequent interviews with Mr. Watson, has resulted finally in his acceptance of the position.

Mr. Watson's duties have not been defined. It is felt that this work is new, and the avenues of usefulness along which such a Secretary can work are not yet clearly determined. These will evolve as Mr. Watson becomes established in his new position.

He at once becomes Manager of the new Credit and Collection Bureau, instead of Assistant Secretary Sizemore, as was stated in publications a month ago. Announcement concerning the Credit and Collection Bureau will go out from Mr. Watson's office soon.

The Market Development movement has, from its inception, been endorsed and encouraged by Mr. Watson. It was in need of a business man to manage and direct it, who could, as occasion required, employ for the writing of articles or advertisements, talent developed along those lines. The movement's greatest need now is its establishment on a business basis, so that when next year membership dues are paid to the National Association on a basis of one-quarter of one per cent ($\frac{1}{4}\%$) of the gross annual business of the members, we shall have established and ready a business organization that is capable of giving members the greatest return possible on the money thus invested in membership dues. The funds available for Market Development this year are limited, so that it is impossible to look for marked results immediately, but the foundation should be laid for a greater work that is expected when our new basis of dues comes into effect.

There are members in the Association who look to the Executive Secretary to gather statistics relating to the nursery indus-

try, and to conduct other business not now undertaken. The Executive Committee, and Mr. Watson, are undetermined as to how much of this can be undertaken at present, but they are giving consideration to these problems, and hope the organization can be made of much greater usefulness to the membership generally.

Because of Mr. Watson's wide popularity, the President feels that there are persons who will expect from him immediately results which it is impossible for the Association to get at present. I want to bespeak for Mr. Watson, therefore, your indulgence while he is getting established and making a survey of the possibilities of further service of this Association. Members must realize that with their help anything is possible—without their help the Executive Secretary can do nothing except mere routine.

Mr. Watson, of course, intends to keep in close touch with the membership, and while committees have been appointed, the Administration and the Executive Secretary feel that every member of the Association is a committeeman upon whom they can call at any time for advice or assistance, so Mr. Watson will constantly desire the help of different members in the work that is being undertaken.

Already the members have suggested that Assistant Secretary Sizemore should be associated with Mr. Watson in the same office, that our work can be more efficiently and economically performed. The Administration is aware of this, but asks the Association's indulgence longer while the organization is being perfected. It seems of vital importance that the Executive Secretary shall be near the Department of Agriculture at Washington, and the Federal Congress there, that our relationships in Washington may be more carefully watched and become more intimate and friendly, with the advantages that accrue from a co-operation thus made possible.

CROP REPORTS

At the Convention in Chicago, the Executive Committee was instructed to see if the Federal Government could be induced to collect for the nursery industry annual reports of the stock in our nurseries. Pursuant to this direction given the Executive Committee, Mr. Moon recently spent a day in Washington with Agriculture Department authorities discussing this subject. The advantages of such annual reports showing the quantity of each variety of stock in the country, its size, and the amount held in each State, are apparent to the nurserymen, for such reports will be invaluable guides to control our propagation, and to help in the distribution of the product, so that surpluses in one locality can be absorbed where shortages exist in another.

In Washington the advantages of such a report were laid before the Federal Horticulture Board, with the statement that from authentic information thus gathered they could issue permits for importations based upon a knowledge of the amount of such stock already in the country, or on the absence of it. Then, too, the advantages that crop reports afford in pest control eliminate the necessity for promiscuous quarantine.

Mr. Estabrook, Chief of the Bureau of Crop Reports, was interviewed. Dr. Marlatt was out of the city, but his assistant was seen. Mr. Kellerman and Mr. Sudworth, of the Federal Board, were interviewed, and favored such statistics. The result of Mr. Moon's day's work is that Secretary Houston now has before him a recommendation from the Bureau of Crop Reports, endorsed informally by members of the F. H. B., that an appropriation of \$50,000 be asked annually for the procurement of such Crop Reports. As soon as necessary the officers of the Nurserymen's Association will go before Secretary Houston or the Agricultural Committee of the House, to further advocate the necessity for gathering these statistics, and the procurement of the appropriation.

FILE YOUR CATALOGUES WITH THE SECRETARY

The Executive Secretary of the American Association has asked us to say that he will be glad to have on file in the General Office of the Association, the catalogue and price-list of every member. As publicity and advertising are a vital part of Market Development, copies of all advertising matter sent out by members will be valuable additions to the files. And, as index to market conditions, surplus and want-lists will be welcome and valuable information. The latter will be treated as confidential.

HOW TO MEET THE QUARANTINE 37 SITUATION

The Advice of Congressman M. L. Davey of Ohio as to How to Have the Ruling Amended—Substance of an Address Delivered Before the Convention of the National Association of Gardeners at Cleveland, O., August 28, 1919

During the time that is at my disposal I wish to discuss some very practical questions which have an interesting and important bearing upon the profession which you represent.

Let me first take up the matter pertaining to prohibition of plant importations, known as Quarantine Ruling No. 37. It is not my proper function to condemn this action of the Federal Horticultural Board inasmuch as my office would make it improper for me to assume that position at this time.

I can, however, make certain practical and helpful suggestions regarding the best method of procedure to get results and I may say that in my judgment the Federal Horticultural Board has gone too far. I believe that there are elements of good in this ruling and likewise I believe that it has gone so far beyond the actual necessities of the situation that certain injustices have been done.

Now then, all you want is the elimination of the injustice and the benefits of fair consideration for the proper interests of your profession. You have a right to ask and demand an impartial hearing on this important question. You do not want any action which is improper. You only want justice and fair play. These things can best be determined by an impartial hearing. Obviously the Federal Horticultural Board would not be in a position to give an impartial hearing, because it has already reached a decision and it is most natural that its members should be prejudiced in favor of their own decision. They are human like the rest of us.

My suggestion is that you proceed to get a full hearing of this matter before the Agricultural Committee of the House. You can get such a hearing if you will proceed in a practical way. The Federal Horticultural Board will certainly listen to the Agricultural Committee of the House because they get their appropriations through that committee. The Agricultural Committee, in turn, will certainly listen to the urgent request either of its own members or a reasonable number of other members of the House. No one can deny you the opportunity of a hearing.

You are not asking this committee to pre-judge your case. You are not asking it to take your side. You are asking it merely to arrange for a hearing at which all the facts from both sides may be fully and freely presented and from which it can draw a just conclusion as to the merits of the case.

If you cannot make a good case, you naturally would not expect favorable action. But if you can make a good case you will expect such action as will result in proper modification of this quarantine ruling.

Those who are interested in this matter are sufficient in numbers to secure such a hearing if they will proceed in a determined manner. Let me tell you something about the attitude of members of Congress. Those whom I have met are practically all fine fellows personally. They are trying to do right in the service they render to their constituents. They are human, of course. Most men are in Congress because they want to be there; most of them want to stay there. They recognize the fact that the best way to stay there is to render satisfactory service to the people they represent.

So if each of you will tell your Congressman that you think an injustice has been done the horticultural profession by this quarantine, that you insist upon an impartial hearing of the whole question before the Agricultural Committee of the House, and that you ask him to use his influence to secure such a hearing, I am sure he will gladly respond favorably.

You are not asking him to commit himself as to the merits of the case. You are asking him merely to help you secure an impartial hearing, which is perfectly right and proper.

Take my advice and don't write a form letter. Take the facts and write them in your own way to your own Congressman. Don't let him put you off with a formal acknowledgment. Tell him you want to know the results of his efforts. If he does not report to you within a reasonable length of time, go after him again. Let him know that you expect results. If he knows that you mean business, you can take my word for it that he will "step on the gas" and try to help you.

Your Congressman wants your votes and the votes of your friends. As long as you do not ask him to do anything wrong or injure anyone else, or violate the rules of proper conduct, he will be glad to help you, if he knows you mean business. But you cannot expect him to do anything for you unless he knows

what you want.

You are not asking anything improper in making this request. Not only will he be glad to help you, but you have an absolutely perfect right to go to him for help. He is your representative and subject to your call on anything that pertains to his office. Don't feel that you are asking something to which you have no right. He knows that you have a right to go to him and that you have a right to insist upon his help, within the limits of propriety.

If every man interested in the horticultural profession will make it his individual business to take this matter up with his own Congressman and insist upon positive help and definite action and keep after him until he gets a satisfactory reply, I can almost guarantee that a hearing will be granted.

From that time on it is entirely a question of making your case before the committee. Also I can almost guarantee that any recommendations which the Agricultural Committee sees fit to make on the basis of the facts and merits of the case as disclosed at the hearing, will be cheerfully and promptly carried out by the Federal Horticultural Board.

If I should talk to you indefinitely I could not give you any more practical method of procedure nor one more likely to be successful than this. I commend it to you for prompt and vigorous action.

—Florists Exchange.

The American Association of Nurserymen is to be congratulated upon securing the services of so able and efficient a man as Mr. John Watson to act in the capacity of executive secretary for the Association. There is no man in the business better or more favorably known or one who so thoroughly enjoys the confidence of the nursery trade.

Mr. Watson's sentiments and ideas belong to the new order of things. His ethics and standards of business conduct are well known, having been president of a National Association so very recently.

The securing of the services of Mr. Watson will insure a progressive and up to date management of the Association's affairs.

We might add, the job will be no sinecure and for the welfare of the trade every member should rally to his support in carrying out the work that is planned.



*John Watson, the newly appointed
Executive Secretary of the
National Association of
Nurserymen*

A JOB FOR NURSERYMEN

Editorial Published in the Country Gentleman of September 6th, 1919.

The propagation of fruit plants is an art. It takes two, three or four years to develop nursery stock to planting size. The war cut down propagation work to an unprecedented degree. France, from which come most of the seedlings used by nurserymen, has been able to grow and ship but a fraction of her normal output. The supply of nursery stock for planting this fall and next spring is short. Fruit stocks will be shorter next year than this. Hundreds of small nurserymen are out of business and more must suspend with the digging of the plantations now maturing, because of inability to secure seedlings for new plantations.

Fall prices are higher than ever known and may well be higher yet by spring. Prices are expected to make a record peak in the fall of 1920 and spring of 1921. Since peach trees are propagated wholly upon American stocks and since they can be produced in two years, it seems reasonable to expect that peach tree prices should be reasonably stabilized by the spring of 1922, but the prices for apple, cherry, plum, pear and quince trees may remain abnormal for some years after the French growers get readjusted. It is not at all certain when that will be.

All this is, of course, perfectly understood by the professional nurserymen, but it is not understood by the folks who buy and plant what the nurseryman sells. Planters should appreciate the situation for two very excellent reasons: First, because the supply of many standard varieties is almost certain to be exhausted before long. That means that orders should go in earlier than ever before. Always urgent, this year and next it may be imperative. Orders should go in early.

Second, shortage and high prices are pretty sure to bring out all manner of old, oversize, runty and generally inferior and undependable stuff which will be offered to buyers under unusual and high-sounding description. There never was a time when the planter needed to use more caution in his purchases. Beware of the fly-by-night salesman of nursery stock.

It is the immediate duty of every agricultural college, experiment station, county agricultural agent and secretary of a horticultural society to revise his list of dependable nurserymen. The inexperienced planter who fails to consult with those really competent to advise him will be entitled to little sympathy if his orchard turns out a failure. Even old-timers in the fruit-raising business may very well see to it that their lightning rods are well grounded.

The nursery business is difficult and hazardous to a degree not appreciated by the planter. Too often the planter has been able to buy good stock at less than the cost of production. Too often the faithful and conscientious propagator has received neither appreciation nor a fair money return. Too often the slick agent and the brass-band catalogue have got the planter's money leaving the planter and the honorable nurseryman to hold the bag.

For long and trying years the nursery business has been conducted in a manner satisfactory to neither the on-the-square producer of nursery stock nor to the ultimate user of that stock. If it is true that the public has never appreciated the good nurseryman, it is also true that the good nurserymen have never pulled together long enough nor hard enough to clean up their industry. They have provided no way by which the average planter can distinguish between the dependable firm and the get-rich-quick rascal.

It is because of this that legislation and regulation of the nursery business become constantly more severe. The next year or two will bring things to a head. If the on-the-square nurserymen of the country permit the scalawag members of the industry to take advantage of the present situation to the general detriment of the fruit-growing public, they may expect, very shortly, a mass of legislation of such character as may put the business of plant propagation upon a new basis. Fruit growing is too important to be put in jeopardy, piecemeal, through petty trickery or wholesale, through the dissemination of pests and diseases.

It is up to the planter to recognize thoroughly good stock and to pay a fair price for it, but it is up to the respectable nurseryman to raise the standard of ethics in his trade and to provide a sure means of identifying himself.

REPLANTING FRUIT TREES IN DEVASTATED FRANCE

Treasurer Hill has called my attention to the work of the American Committee for Devastated France, which is endeavoring to raise \$100,000 to replace the fruit trees destroyed by the war in the four cantons of Aisne-Soissons, Vic-sur-Aisne, Coucy-le-Chateau, and Anizy.

For a time the American Association of Nurserymen had a committee on French Relief. It was, however, felt that gifts of trees would deprive the French growers of the opportunity to sell their products, and as they have doubtless been denied this opportunity during the period of the war, it seems only right that now that the opportunity has come to them, that American nurserymen should not donate trees which would deprive them of the only market of consequence that they have had in four years.

If, therefore, any nurserymen desire to help with money contributions, the war sufferers of France to replace their orchards, these contributions can be sent to our Executive Secretary, John Watson, 400 Nassau Street, Princeton, N. J., who will be glad to have them applied to the purpose for which they were sent through arrangements which he can consummate with organized committees that are restoring these trees.

Very respectfully,
J. Edward Moon,
President of the American
Association of Nurserymen.

The Tree Club of America have appropriated \$8000.00 for replacing fruit trees in devastated France. The purchasing and planting of these has been assigned to the American Friends Service Committee, and Wendell F. Oliver who was with the Wm. H. Moon Company, and is now connected with the Friends work, with Henry Stabler, has been placed in charge of this work.

They are at present visiting the nurseries of Orleans, France, with an idea of purchasing as many fruit trees as are available, with their appropriation, and will then have the planting done in the districts which are most in need of the reestablishment of their orchards.

Weehawken, N. J., September 11th, 1919.

The National Nurseryman,
Hatboro, Pa.

Gentlemen:—

I am retiring from actual business and wish to thank you and all my friends and customers for the good will and their very liberal support in business shown to me during the thirty years I have been residing in the United States.

For some years I have been intending to retire from business and leave the work to the younger generation, the four sons of my brother who are growing nursery stock in Boskoop (Holland).

Some years ago my brother died and the sons have been conducting the nursery for their mother. Last March she also died and now I have to go to settle up the business in which I have been a partner. With Quarantine 37 in force I may just as well stay there until better times come and more friendly relations exist between the different nations.

It is with sorrow that we leave you and the U. S. where we have lived most of our lives and have so many friends, but we will keep up the acquaintance and let you hear from me once in a while. Please send your paper to me in Holland to P. Ouwerkerk, Boskoop. (Holland).

Yours respectfully,

P. OUWERKERK.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., November 1919

Subscribers to "Nurserymen's Fund for Market Development"

A SUGGESTION REGARDING QUARANTINE NO. 37.

How to meet the quarantine No.
37 situation as originally pub-
lished in the "Florists' Ex-
change" of September 20th,
we think is the best suggestion

made yet, in fact, the only practical one that has come to
our notice. We are publishing it on a separate page and
commend it to the attention of the Legislative Committee
of the American Association of Nurserymen and would
suggest the Chairman of this Committee get in touch with
the Legislative Committee of the Society of American
Florists to work out the details whereby it can be ear-
ried out jointly.

AS OTHERS SEE US

We publish an editorial from the "Coun-
try Gentleman" of September 6th. This
was written for the consumer but there
is much in it that will be of interest to the
nurserymen themselves, especially as it gives them an
idea how the nursery business is viewed by others.

The author evidently is fully alive to the needs of the
trade.

It certainly is a challenge to the nurserymen and one
which we cannot side-step without loss to ourselves.

TEACH THE PUBLIC HOW TO BUY

If the market development
movement expects to succeed,
it should not overlook the
buyers' interest, in fact, the
buyers' interest should be dominant. While the move-
ment was for the specific object of creating a demand for
nursery products, this can only be done successfully by
educating the buying public to get full value for the
money they invest. Perhaps the most common failing of

the uninitiated planter of nursery stock is impatience.
Every nurseryman knows that nine customers out of ten
want a plant that is already grown, they dislike to think
of the years intervening before they will get a peach or
an apple from the tree they are planting.

The man or woman who is planting the grounds around
the newly built home is impatient to see the trees and
bushes fully grown. Nurserymen have catered to this
fault and in many instances have capitalized it to per-
haps a greater extent than it should be.

While it may be wrong to condemn the planting of de-
veloped trees and plants, those that advocate it and sell
them should see to it that full value is given. A four inch
Norway Maple that has only been transplanted once from
the seed bed may have a large top, be well developed in
other ways but does not represent the same value nor
does it have the chance to give satisfactory results as a
much smaller tree that has been transplanted oftener and
been properly pruned, so as to give the trees the right
foundation and bring it to a condition where it can be
moved with safety, yet the ignorant buyer will readily
pay a higher price for the larger tree.

The expert knows that a one year peach tree, green,
plump, and of good color is a better investment for the
purchaser than a hide-bound three year old and four or
five times the size. Yet nurserymen too often cater to
the impatient buyer and sell him the latter at an advanced
price. For real business building that will bring endur-
ing results to the nurserymen there could be no better
aim than to educate the public to distinguish quality. Nur-
sery stock in a large measure is bought on faith and to
betray that faith is not sound business. It is not so
necessary to teach the public what to buy as how to buy,
this fact was brought home to the writer very forcibly
upon a visit to a large department store which makes a
business of handling nursery stock in the Spring season.
It was a safe estimate to say that fully 50% of the plants
exhibited for sale were dead or in such a condition that
it was hardly possible for them to grow even under the
best of treatment, yet they were being sold quite readily,
it was really amusing if it were not so tragic.

The Nurserymen's National Service Bureau could not
have a higher aim or give better service to both the nur-
serymen and the public than by making this the domin-
ating aim of the organization.

It is a common saying, "that nothing succeeds like suc-
cess" and the man who plants one tree that is successful
is a better prospect than a dozen who have experienced
expensive failures in planting.

PRICES

Trade catalogues are beginning to come to hand. Ex-
amination of those received shows, that while there has
been a much needed stiffening up all along the line, the
prices are reasonable and have not been recklessly ad-
vanced as much as they could stand which has apparently
been the case in so many lines of merchandise.

Fruit trees, as was to be expected perhaps, show the
most consistent advance in price. The best grades of
peach are priced at \$25.00 a hundred. Apples, pears,
plums and cherries at \$40.00 a hundred. This is not an

unreasonable price for fruit trees even under pre-war conditions.

It is prices that gives the grower and distributor an opportunity to deliver goods that will give satisfactory results and get a profit which was impossible when they were offered at \$6.00 or \$10.00 per hundred.



THE LATE LUDWIG HEYN

After a short illness death took away the well-known sole proprietor of Conrad Appel, Darmstadt, Germany. Councillor of Commerce, Mr. Ludwig Heyn, on July 13th, 1919.

Mr. Heyn was in his 61st year and entered the business of his father and uncle on July 1st, 1888—31 years ago. His world-wide experience in the seed trade has enabled him to rise the firm into highest repute, and he always applied his entire energy and interest to the business. His thorough knowledge and remarkable business ability was well known in the trade.

Conrad Appel's business was established in 1789 by the Great-Grandfather of Mr. Heyn, and from small proportions it gradually increased to its present high standing and world-wide reputation.

He is survived by his widow, and the business is transferred to his nephew and son of his only sister, Mr. Paul Anding, who has taken charge of the affairs on August 12th, 1919, and who will continue the business in the same style as before. Appel now belongs to the same family in the fifth generation.

TREE SEED

By Thomas Lane, Dresher, Pa.

The tree seed business is in a very uncertain condition. Quarantine No. 37 has without question caused many nurserymen to sit up and figure where future supplies are coming from. This has had its effect on the demand for all kinds of seed. The demand is undoubtedly good but all conditions pertaining to the procuring of the seeds are very unsatisfactory.

Take for instance, one section, reports, no crop, another section, poor crop, another one, fair crop but labor scarce and high, therefore, unable to arrange for collecting. The indications are that practically all kinds of tree seeds will be short from one cause or another.

Mahaleb Cherry seed, according to reports will be approximately a one-half crop. Myrobolan Plum is reported, no crop, of European seed.

French Crab Apple seed promises a fairly good supply.

French Pear is doubtful as yet. Kieffer Pear and Japanese pear seed promises a good crop. Prices, of course will be higher as labor, transportation and all things that enter into the business are advanced.

Those who want to buy seeds this year should place their orders early with reliable collectors or dealers and not allow prices to deter them as it is hardly likely that

he will be able to get a full supply in any kind and prices are not likely to drop.

Among the ornamental or forest trees, white pine and red pine seed are very scarce and it is very difficult to get any report at all on the prospects of obtaining any kind of seed.

PRELIMINARY REPORT

On the Prospects of the new Crop of the Principal Deciduous and Evergreen Tree Seeds in Germany Sent by Conrad Appel, Darmstadt.

Although it is still somewhat early to give a complete report on the results of the various species of Forest Tree Seeds, it will certainly be of great interest to the Nursery Trade to be posted as early as possible on the prospects of the crop, on the quantities and stocks available of seeds of satisfactory quality, and for this reason I herewith beg to report as follows:

Acer platanoides and *Acer Pseudoplatanus*, Norway Maple and Sycamore, promise a medium yield. The same refers to *Fraxinus excelsior*, Common Ash. *Betula alba*, Common Birch, has nearly a failure, while *Alnus glutinosa* and *Alnus incana*, Red and White Alder, can be supplied this season in fair qualities; *Carpinus Betulus*, Hornbeam, fails entirely. Of *Robinia Pseudacacia*, Black Locust or Acacia, I hope to be able to offer a parcel of good value. In regard to *Spartium scoparium*, Broom, and *Ulex europaeus*, Gorse or Whin, it is too early to give a report. Of *Tilia grandifolia* and *Tilia parvifolia*, Summer and Winter Lime, small crops can be expected. *Fagus sylvatica*, Beech, has a perfect failure.

Concerning the principal Evergreen Tree Seeds I beg to mention that *Pinus Strobus*, Weymouth or White Pine, will have a small crop and will be in strong demand. Of *Abies pectinata*, Silver Fir, no cones could be gathered this year. *Larix europaea*, European or Tyrolean Larch, is yielding very small quantities of cones, of Tyrolean seed very little will be obtainable. *Picea excelsa*, Common Spruce, new seed fails entirely. The small stocks of reliable quality carried over from last season will soon be disposed of. Early ordering will be advisable. *Pinus sylvestris*, Scotch Fir, brings a medium crop. The quantity of new seed available is depending on the collectors, whether they will be able to secure all cones grown in the various districts. Of course high prices have to be granted for the gathering, and the seed will be accordingly high. The demand will be heavy and soon take up the limited stocks on hand. In regard to *Pinus austriaca*, Austrian or Black Pine, *Pinus maritima*, Maritime Pine, and *Pinus Laricio*, Corsican Pine, it is too early to say anything definite.

A further report will follow in due course; prices for my most reliable seed with guaranteed germinative power can be obtained upon application.

Darmstadt, September 9th, 1919. Conrad Appel.

APPLE CROP OF NOVA SCOTIA

Consul General Evan E. Young reports from Halifax, Nova Scotia, that estimates in regard to the apple crop show a decrease from earlier predictions. It is now expected that the crop will be approximately 1,300,000 barrels, a marked increase over that of last year which was about 450,000 barrels.

WANTED

WANTED—Thoroughly reliable young to middle aged man, familiar with names and habits of ornamental trees, shrubs, evergreens and roses, with practical knowledge of Landscape work and a **SALESMAN**. A permanent position to the right man with reasonable salary and every chance for advancement.
DRUMM SEED & FLORAL CO.,
 507 Houston Street - Ft. Worth, Texas

WANTED

A first-class salesman who is capable of taking care of general nursery correspondence. State experience, age and salary desired.

FANCHER CREEK NURSERIES,
Fresno, Calif.

WANTED

Holland nurseryman, wishes position as foreman. Has American and European experience in propagating and handling of all kinds of nursery stock. State full particulars and address.

B. M. H. in care of National Nurseryman.

WANTED—Rosa Multiflora Stock. Kindly quote prices. We have a very large stock of choice shrubs and trees for sale. Write us.

ELIZABETH NURSERY COMPANY,
Elizabeth, N. J.

AMERICAN FLORIST'S TRADE DIRECTORY

Price \$3.00, Postpaid

For Sale By
NATIONAL NURSERYMAN PUB. CO. Inc.,
HATBORO, - - - PA.

A Few Hundred Bushels
NATURAL TENN. PEACH SEED
@ \$4.50 per bu.

SOUTHERN NURSERY CO.,
Winchester - - - Tenn.

We offer for fall shipment, Catalpa, Willow, Lombardy and Carolina Poplar, Oriental Plane, Silver Leaf Maple 8 to 14 ft. Spirea, Deutzia, Weigelia, Althea, Privets, Forsythia, Lilac, Crape Myrtle, Corral Berry, Spice Bush, Magnolia 2 to 5 ft.

CURETON NURSERIES, Austell, Ga.

500,000 California Privet
—Hardwood Cuttings—
1,000,000 Cal. Privet
250,000 Privet Amurense
1,000,000 Shade Trees
1,000,000 Hardy Shrubs
100,000 Roses

Write for price list.
OAK LAWN NURSERY,
Huntsville, Ala.

Peach Pits From California

Place your orders at once and place us in a position to select the best seed and care for it properly.

Fresno Nursery Co., Fresno
California

FOR SALE

Eighty Acres well improved rolling land, six room house, grafting shop, good barn, new silo, good well and windmill, five new individual hog houses, chicken house. Buildings all well painted a year ago this fall. About 200 rods of new woven wire fence on the place. This would be a very suitable place for stock raising in connection with a nursery as there is pasture land and improvements for both.

This nursery has been known as The Hawkeye Nursery which has been running until the last few years and was fixed up purposely for a nursery having many advantages in the way of landscape work and variety of trees in the yard and orchard that is matured.

Location is very good for a nursery as there is no nursery near, it is 12 miles southwest of Webster City, 6 miles north of Stratford, 4 miles southeast of Homer and 7½ miles northwest of Stanhope. Asking \$215.00 per acre.

For further information write

R. A. KAUFFMAN

OAKDALE - - - IOWA

Closing-Out Sale

We have discontinued the Nursery business and offer for sale at very low prices a large stock of very choice shade trees and hedge plants of the following varieties:

SUGAR MAPLE
SILVER MAPLE
NORWAY MAPLE
AMERICAN ELMS
ENGLISH WALNUTS
CAROLINA POPLARS
AMERICAN LINDENS

Extra fine lot of California Privet.

These trees are from eight to fifteen feet high 1-3 inches in diameter, nicely headed with straight, sturdy bodies. The Privet is from two feet to four feet high, very heavily branched.

Six thousand trees, two thousand Privet to select from.

Write or phone your order now.

Virginia Nursery Company

PURCELLVILLE, VA.

THE American Association of Nurserymen

ORGANIZED 1875

Offers Its Members:

THE NURSERYMEN'S NATIONAL SERVICE BUREAU,

From which educational publicity work is conducted for the purpose of creating a larger and more profitable market for what the members grow, by making the use of nursery stock more profitable to those who buy and plant it. Directed by a Committee of representative and conservative members and financed by the Association.

CREDIT AND COLLECTION BUREAU,

Handling claims and collections for members only. Where suit is necessary, an exclusive Attorney service under bond to the Association.

ARBITRATION COMMITTEE,

For the adjustment of claims and disputed accounts between members only.

TRAFFIC AND FREIGHT CLAIM BUREAU,

Where freight and express bills are audited for members only and overcharges are collected. Members receive free expert advice on all Traffic matters from Mr. Charles Sizemore, an authority on transportation problems.

COMMITTEES of representative members who handle and report to the Association on such subjects as LEGISLATION, TARIFF, NOMENCLATURE, STANDARDIZATION, POLICIES, etc.

BUSINESS AND PERSONAL ASSOCIATION with nearly Four Hundred Nursery firms scattered over the country; the prominent, leading, progressive and successful men in the trade who unite for cooperative effort to make the business of each more profitable.

All these activities are centered in the office of the Executive Secretary who is not connected with any nursery enterprise, but who is a nurseryman and a former President of the Association; whose office handles the business of the Association and no other business.

For Further Information Address:

American Association of Nurserymen

General Offices, PRINCETON, New Jersey

JOHN WATSON, *Executive Secretary.*

ABELIA GRANDIFLORA

Nice lot of field grown, well branched stock. Three sizes, 8 to 12 in., 12 to 18 in., 18 to 24 in. By the 100, 1,000 or 10,000. We have a surplus of Rosa Hugonis and Pink Rambler.

THOMASVILLE NURSERIES
THOMASVILLE GA.

Strawberry Plants

We offer for delivery, winter and spring 1919-1920 the following strawberry plants.

1,500,000 Gandy 1,500,000 Klondike
1,000,000 Parsons Beauty 600,000 Big Joe

Also limited stock of other standard and everbearing varieties. We are located in the largest strawberry center in the world and have the soil and climate to produce the best strawberry plants.

ASPARAGUS ROOTS, Leading Varieties

200,000 2 year No. 1

700,000 1 year No. 1

Correspondence solicited.

Bunting's Nurseries, G. E. BUNTING & SONS, Props.
Selbyville—Delaware

Subscribers to "Nurserymen's Fund for Market Development."

TULIPS

PEONIES

IRISES

Peonies.—Standard varieties. Also singles and light-weight doubles adapted to ornamental planting.

Tulips.—Cottage and Darwin in standard varieties and in mixtures. Also small planting sizes of Cottage and Darwin mixtures, Wedding Veil, White Queen, Kate Greenaway, Clara Butt, Bouton d'Orr and others.

Irises.—Siberian in blue, white, and purple. Write for prices by the bushel or barrel of German Florentina, Flavescens, Kochii, Mad. Chereau, Gazelle.

ORONOGO FLOWER GARDENS,

CARTERVILLE

MO.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myroholan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

PRINTING

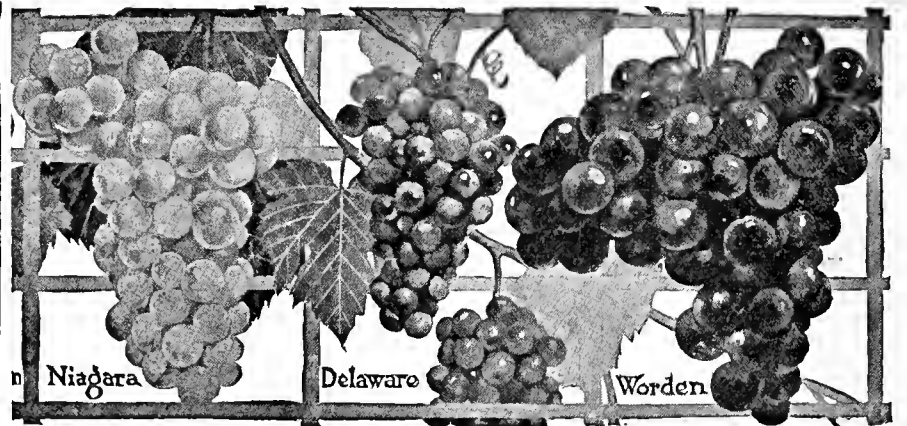
Catalogues
Stationery
Business Forms



The Robinson
Publishing Co
Hatboro, Pa.

Specialists in Nursery Printing

Ask for Prices. We are the printers of this Magazine



T. S. HUBBARD CO.
Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting

Established 1866

Send for Catalogue

We will be pleased to make you prices on any of the following stock, well grown, well dug and well packed:

8000	Spirea Van Houtte	2-3 ft.
7000	Spirea Van Houtte	3-4 ft.
2000	Polish Privet	2-3 ft.
500	Purple Lilac (stocky)	3-4 ft.
1000	Lonicera Belle Albida	2-3 ft.
300	Golden Elder	2-3 ft.
200	Cornus Siberica	2-3 ft.
300	Snowball	2-3 ft.
	European White Birch Low branched	6-8 ft.
	Box Elder	6-8, 8-10, 10-12 up to 2 in.
	European Mt. Ash	5-6 and 6-8 ft.

The Coe, Converse & Edwards Co.

FORT ATKINSON, WIS.

.. STRAWBERRY PLANTS ..

Summer and Fall bearing varieties, shipped to you or direct to your customer under your tag.

Plants and service that pleases both you and your trade.

Let us quote you

V. R. ALLEN,

59 Lane Avenue

Seaford, Del.

HARDY PERENNIAL PLANTS

Phlox, Iris, Delphiniums, Shasta Daisies and many other perennials. Send us your want list for prices or ask us for wholesale price-list.

WILLIAM TOOLE & SON,
Hardy Plant & Pansy Farm,

Baraboo

Wisconsin

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance.

FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

THE ELM CITY NURSERY COMPANY, Woodmont Nurseries, Inc., New Haven, Conn.

IBOLIUM

THE NEW Hardy Hybrid Privet

Resembles California Privet in Habit with this added advantage:

It's as **Hardy** as **Ibota Privet** and will succeed where **Ibota** thrives.

Name, IBOLIUM, coined thus:—IBO from Ibota and LIUM from Ovalifolium

REGISTRATION

Society of American Florists

Apr. 5th, 1919

IBOLIUM Privet is the product of crossing the California Privet (Seed parent) with Ibota, the hardy Chinese Privet.

It is similar in general character to California Privet being perhaps somewhat more robust in habit of growth. It is inclined to bush more freely from the base than California Privet, a decided advantage.

It can be propagated with the same ease as California Privet either from hardwood or softwood cuttings and is quite able to withstand the abuse incident to the ordinary handling of a hedge plant, both by the Nurseryman and the planter, without serious injury.

Its great claim for the public's consideration as compared with California Privet is its *hardiness* taking in this respect from the pollen parent, Ibota, having proven to be perfectly hardy wherever Ibota Privet is hardy. This gives this new hardy hybrid a very extended range of usefulness.

The extreme test as to hardiness was proven out in the winter of 1917-18 when IBOLIUM Privet stood the test without the slightest winter injury side by side with the California Privet which was not only killed to the ground but in many cases died root and branch.

John Young, Sec'y.



IBOLIUM Privet—The above cut is from photo of a plant of IBOLIUM Privet, three years old. Softwood cuttings have been taken from this plant twice this summer. This is the identical plant which was shipped to Chicago for exhibition purposes, was knocking about for at least three weeks and on its return to the Nursery appeared to be little the worse for wear, proving the remarkable vitality of IBOLIUM Privet.

CERTIFICATE OF MERIT

American Nurserymen's Association
Chicago Convention, June 27th, 1919.
Report of Committee on Plant Exhibits
Jno. S. Kerr, Chairman.

Your committee is pleased to report upon IBOLIUM Privet, originated and now introduced by The Elm City Nursery Company, Woodmont Nurseries, Inc., New Haven, Conn.

IBOLIUM Privet is the result of cross breeding between the Ibota Privet and California Privet and combines the hardiness of the Ibota with the fine foliage and growth characteristics of the California Privet. Evidently IBOLIUM is quite an acquisition to the privets for northern sections.

Your committee readily commends this new introduction as very meritorious.

Jno. S. Kerr,
Robert Pyle,
Alvin E. Nelson,
Committee.

IBOLIUM Privet is ideal for hardy hedge purposes, for training into specimens, general decoration as a tub plant, also in its natural form wherever a tall dignified shrub is desired. It also thrives well in the shade. It produces freely large panicles of pure white flowers followed by clusters of glossy black fruits making the whole shrub very ornamental. The usefulness of IBOLIUM Privet is almost without limit.

**INTRODUCED NOW for the FIRST TIME to the TRADE
for Propagating Purposes--Delivery November 25th, 1919**

PRICES ON APPLICATION

We reserve the right to withdraw this offer after a given quantity is booked up as the entire stock of IBOLIUM Privet at the present time is only about 10,000.

THE ELM CITY NURSERY COMPANY, WOODMONT NURSERIES, Inc.
Originators and Introducers of IBOLIUM Privet New Haven, Connecticut

Also Originators and Introducers of BOX-BARBERRY. We offer well rooted summer frame cuttings of BOX-BARBERRY.

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials.

Send us your want list.

Inspect our stock.

The Gardeners' Chronicle

(Established 1841)

The BEST and OLDEST horticultural paper in England. Price 4d per week.

Send for free copy and subscription rates to:—

The Publishers, 41 Wellington St.

W. C. 2, London, England



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address
The Florists' Exchange, P. O. Box 100, Times Square Sta.

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSEYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.

147 Summer St.

Boston, Mass.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries
Raspberries
Blackberries
Dewberries
Berberry

Currants
Gooseberries
Grape Vines
Privet
Spirea

Rhubarb
Asparagus
Horseradish
Hardwood Cuttings
Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS

NEW CARLISLE

OHIO

A Fine Stock of

Norway Maple, Silver Maple, European Sycamore

and other Ornamental Trees in All Sizes

A beautiful lot of CUT LEAF BIRCH 8-10 ft. and 10-12 ft.

Hardy Shrubs of all kinds

Also a limited supply of Fruit Trees and Small Fruit Plants.

T. B. WEST

Maple Bend Nursery

Perry, Ohio

W. T. HOOD & CO.

OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1920

Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; California Privet, 2, 3, and 4 years; Sugar Maple Seedling, six inches to ten feet.

Write for Prices

TO THE TRADE ONLY

We offer a general assortment of Nursery stock, and Nursery supplies, including—

A few thousand Vrooman

FRANQUETTE AND MAYETTE WALNUTS,

both grafted, and seedlings from grafted trees, and

ITALIAN OR SPANISH CHESTNUT

Portland Wholesale Nursery Co.

122 1/2 GRAND AVENUE

PORTLAND, OREGON

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

When writing to Advertisers please mention the National Nurseryman.

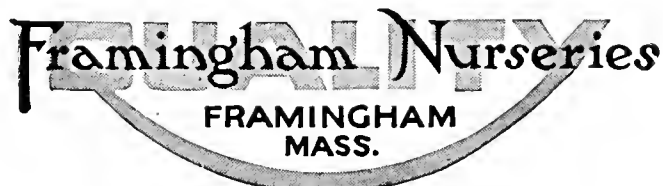
FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.



NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

THE CHASE LABELS

For Nurserymen and Florists are Excelled by None

Plain, Painted, Wired with Tinned or Copper Wire and
PRINTED IN ANY MANNER that may be called for

*Prices as low as First-Class Work and Unequalled Promptness in
Delivery will justify.*

THE BENJAMIN CHASE CO.

P. O. Address, DERRY VILLAGE, N. H.

Western Union Telegraph, DERRY, N. H.

Subscribers to "Nurserymen's Fund for Market Development."

ATTENTION!

We are now offering our usual brands of

RAFFIA

Best Quality—

—Lowest Prices

Price List mailed on request.

Thomas B. Meehan Co.

DIRECT IMPORTERS

Dresher

-

-

Penna.

Subscribers to "Nurserymen's Fund for Market Development."

We Solicit Correspondence and a List of Your Wants

For Fall 1919 and Spring 1920

CALIFORNIA PRIVET, 2 yr. extra good.
All grades—Special prices on carload lots. Samples if desired.
Oriental Planes and Norway Maples, Pin and Willow Oaks,
Lombardy Poplars.
A select lot of trees in all sizes—transplanted.
APPLES: 2 yr. Buds:—mostly $\frac{3}{8}$ and $\frac{1}{2}$ in. grades
1 yr. Buds:—All the standard varieties in 2-3 ft.
and 3-4 ft. grades
PEACH: A few thousand—nice 1 year; mostly $\frac{3}{8}$ and up, 4-6 ft.
1 yr. ASPARAGUS.
MISCELLANEOUS.
A good stock of Flowering Shrubs, Shade Trees, etc. etc.
SEND US YOUR TRADE AND WANT LIST

Baltimore, Md.

Franklin Davis Nurs., Inc.

404 W. Baltimore St.

Joseph Davis, General Manager.

Peonies • A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

Write for our List

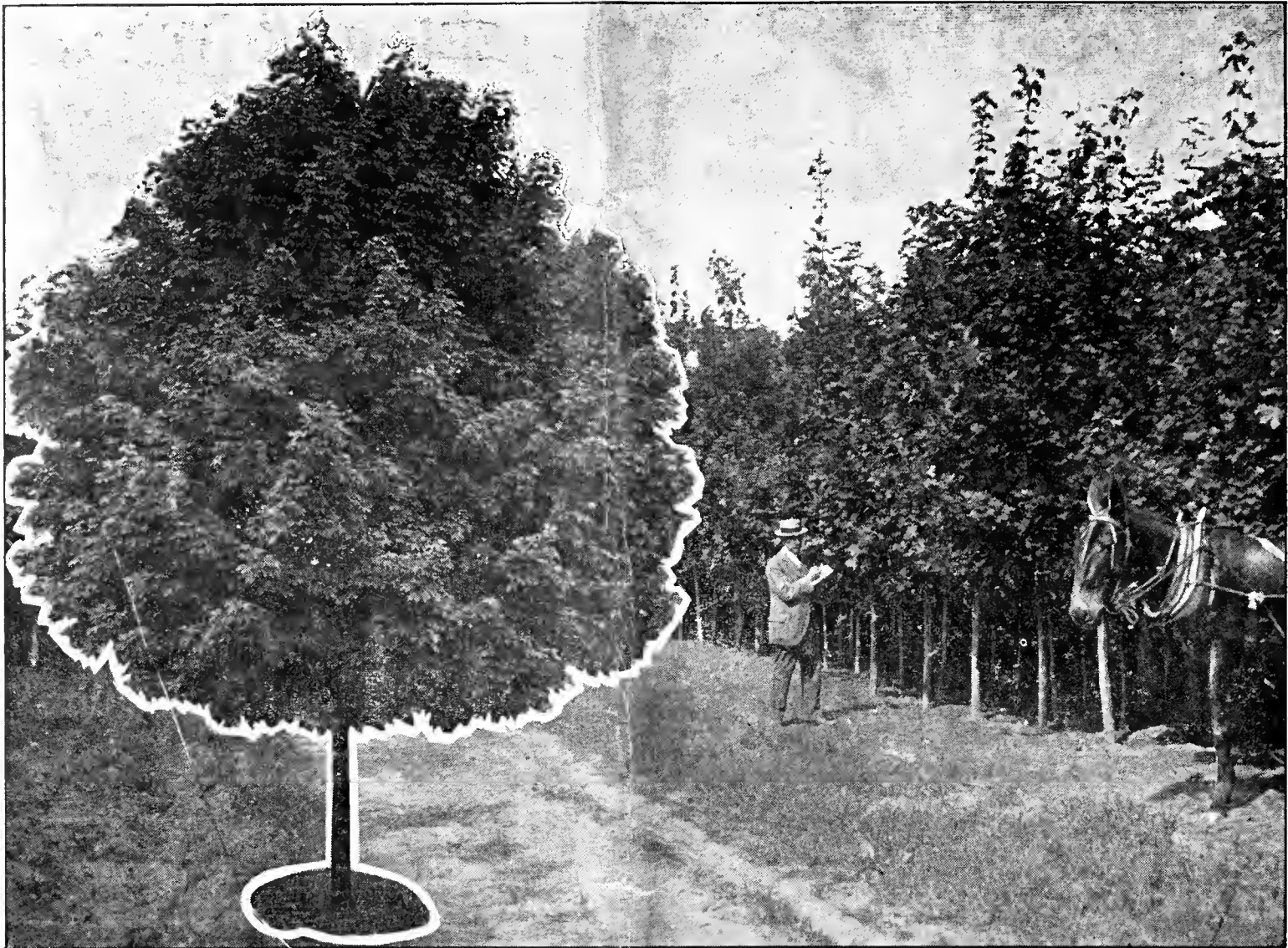
Cannas, Dahlias and Gladioli

C. BETSCHER, Dover, O., U. S. A.

When writing to Advertisers please mention the National Nurseryman.

NORWAY MAPLES

(The finest and most satisfactory of all shade trees)



We have the largest blocks in America,—all sizes for all purposes. Our maples have straight, smooth trunks, fine tops and clean, strong roots,—they will make good. Tell us how many you can use and the sizes and we will quote interesting prices. Better yet, come to the Nursery and inspect and mark the trees for yourself. You will be pleased with what we have to offer.

NORWAY MAPLES (*Acer platanoides*), have typical Maple leaf, large and bright green, fading to gold in the fall. Trunk and branches are sturdy and strong, lending an effect of ruggedness. Growth is fast. Branches and foliage are thick and compact, and the head, which is round-topped, begins to branch not far above the ground. The tree is large, towering 50 feet high when fully grown. For lining the sides of lanes and roads, for a lawn, to protect the house from sun and weather, for shade, and for real permanent worth in all landscape planting, there are no other trees in its class. The handsomest American lawn tree. We offer,—

5,000	8 to 10 ft., 1 to 1½ in.	9,000	2½ to 3 in.
6,000	10 to 12 ft., 1½ to 1¾ in.	8,000	3 to 3½ in.
7,000	12 to 14 ft., 1¾ to 2 in.	3,000	3½ to 4 in.
8,000	14 to 16 ft., 2 to 2½ in.	1,000	4 in.

ASK FOR SPECIAL PRICES ON CAR LOTS. DO IT NOW.

HARRISONS' NURSERIES,

J. G. Harrison & Sons

BERLIN, - MARYLAND

Subscribers to "Nurserymen's Fund for Market Development."



THE NATIONAL NURSERYMAN



NOVEMBER 1919

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of

Apple, Cherry, Peach
Berberis, Spiraea Van
Houtte, Other Ornamentals
Shrubs, H. P. Roses, Etc.

Will be pleased to quote on your list of wants

I. E. Ilgenfritz' Sons Co.

Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa

Our Specialty

A large assortment of high quality Nursery
Stock for the Wholesale Trade.
Fruit Trees, Small Fruits, Ornamental Trees,
Shrubs, Roses, and Vines.

A FINE LOT OF
Elm, American White, all sizes

Wanted — Hansen Hybrid Plums and Compass

Ask for Trade Lists. Write us about your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants

Everbearing and Standard

From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company

Strawberry Specialists,

Salisbury, - Maryland

Subscribers to "Nurserymen's Fund for Market Development."

Be a regular Customer, for we have a complete line of stock grown and cultivated to the highest standard, for a particular retail trade.

C. R. BURR & CO.

Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock



The Leading Question

now-a-days is where to procure adequate and satisfactory supplies of stock. We are not as heavily stocked this year as we wish we were, but fortunately we have had the largest stocks this season that we have ever had. They are becoming booked up quite rapidly, but we can still supply very good assortments in most of our leading lines. The growing season has been a favorable one so that grades and quality will be up to "J & P Preferred" standard.

Write us about any of the following articles,—or about **anything** you are needing. If we haven't it, maybe we can "put you next."

CLIMBING ROSES,
CLEMATIS PANICULATA,
CLIMBING VINES,
FLOWERING SHRUBS,
LILACS,
AMPELOPSIS VEITCHII
HERBACEOUS PERENNIALS,
PAEONIAS,
ORNAMENTAL TREES,
EVERGREENS.

Our fall trade-list was mailed out Sept. 14th. Did you receive a copy? If you did not and are "in the trade" we would like you to have one and to place your name on our mailing list. Please use printed stationery when writing, though, or enclose business card. For our customers' protection, we send our lists only to "the trade."

Jackson & Perkins Company
Newark, - New York

The
Preferred
Stock

The
Preferred
Stock

Dutch Bulbs

Hyacinths, Tulips and Narcissus
Ready for shipment from New York

JAP. LILY BULBS

Lilium, Giganteum, Auratum, Rubrum, Album,
Melpomene, Roseum, etc.
Ready November, December

NEW ROSE STOCK

Rosa Multiflora Japonica Seeds or Seedlings
Ready November, December

RAFFIA Red Star Brand
A. A. West Coast

Also dyed in various colors for marking trees,
etc., always in stock. Prompt shipments.

Write for prices, specifically stating
requirements

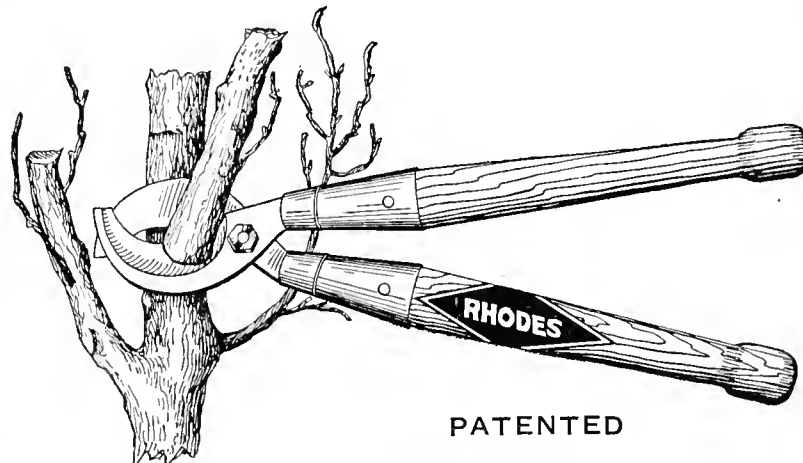
McHUTCHISON & CO.

95 Chambers St.

New York

RHODES DOUBLE .. CUT .. PRUNING SHEARS

In Use Throughout the World



The finest cutting and best made pruner on the market and the only one that cuts from both sides of the limb and does not bruise the bark. Made in all styles and sizes.

They are advertised in all the leading journals throughout the country and will prove a profitable line for you to handle. All goods delivered.

Send for circular and trade discounts.

Rhodes Mfg. Co., 524 S. Division Avenue,
Grand Rapids, Mich.

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

COLLECTORS OF TREE SEEDS

THE
North-Eastern Forestry Co.
CHESHIRE
...Connecticut...

Subscribers to "Nurserymen's Fund for Market Development."

PAINESVILLE NURSERIES



THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

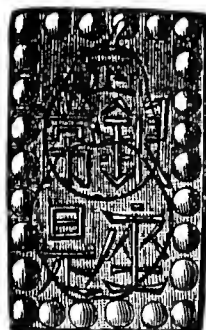
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

SHRUBS SHADE TREES EVERGREENS

Good assortment. Excellent quality.

All our own growing.

Fall trade list now ready. Ask for your copy.

HUNTSVILLE WHOLESALE NURSERIES

HUNTSVILLE, ALA.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS
BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

73 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

SURPLUS STOCK

- 100 Ailanthus, 1½-2 inches
- 1000 White Ash, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 1½ to 2 inches, 2 to 2½ inches
- 140 Box Elder, 10 to 12 ft., 1½ to 2 inches
- 12000 Elm, 10 to 12 ft., 1½ to 2 inches, 2 to 2½ inches, 2½ to 3 inch
- 120 Linden, 10 to 12 ft.
- 12000 Norway Maple, 1½ to 2 inch, 2 to 2½ inch, 2½ to 3 inch, 3 to 3½ inch, 3½ to 4 inch.
- 300 Schwedleri Maple, 2½ to 3 inch, 3 to 3½ inch, 3½ to 4 inch.
- 5000 Soft Maple, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 1½ to 2 inch.
- 800 Lombardy Poplar, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 2 to 2½ inch, 2½ to 3 inch.
- 200 Tulip Tree, 1½ to 2 inch, 2 to 2½ inch.
- 150 Weeping Willow, all sizes up to 3 inch.
- 150 Erect Willow, all sizes up to 2 inch.
- 1500 Viburnum Opulus, 3 to 4 ft., 4 to 5 ft.
- 2500 Viburnum Sterilis, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
- 500 Deutzia Crenata, 2 to 3 ft.
- 400 Deutzia Candidissima, 2 to 3 ft.
- 3000 Deutzia Pride of Rochester, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
- 5000 Lilac Purple, 2 to 3 ft., 3 to 4 ft.
- 1000 Lilac White, 2 to 3 ft.
- 1200 Philadelphus Grandiflora, 3 to 4 ft., 4 to 5 ft., 5 to 6 ft.
- 500 Philadelphus Falconeri, 3 to 4 ft., 4 to 5 ft.
- 900 Golden Elder, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
- 1600 Spirea Billardi, 2 to 3 ft., 3 to 4 ft.
- 1200 Spirea Collosa Alba, 10 to 12 inch.
- 400 Spirea Reevesi, 2 to 3 ft.
- 2000 Spirea Thunbergii, 2 to 3 ft.
- 4000 Snowberry, 2 to 3 ft., 3 to 4 ft.
- 3500 Indian Currant, 2 to 3 ft., 3 to 4 ft.
- 1500 Spirea Salicifolia, 2 to 3, 3 to 4.

C. M. Hobbs & Sons, Bridgeport, Indiana

The National Nurseryman.

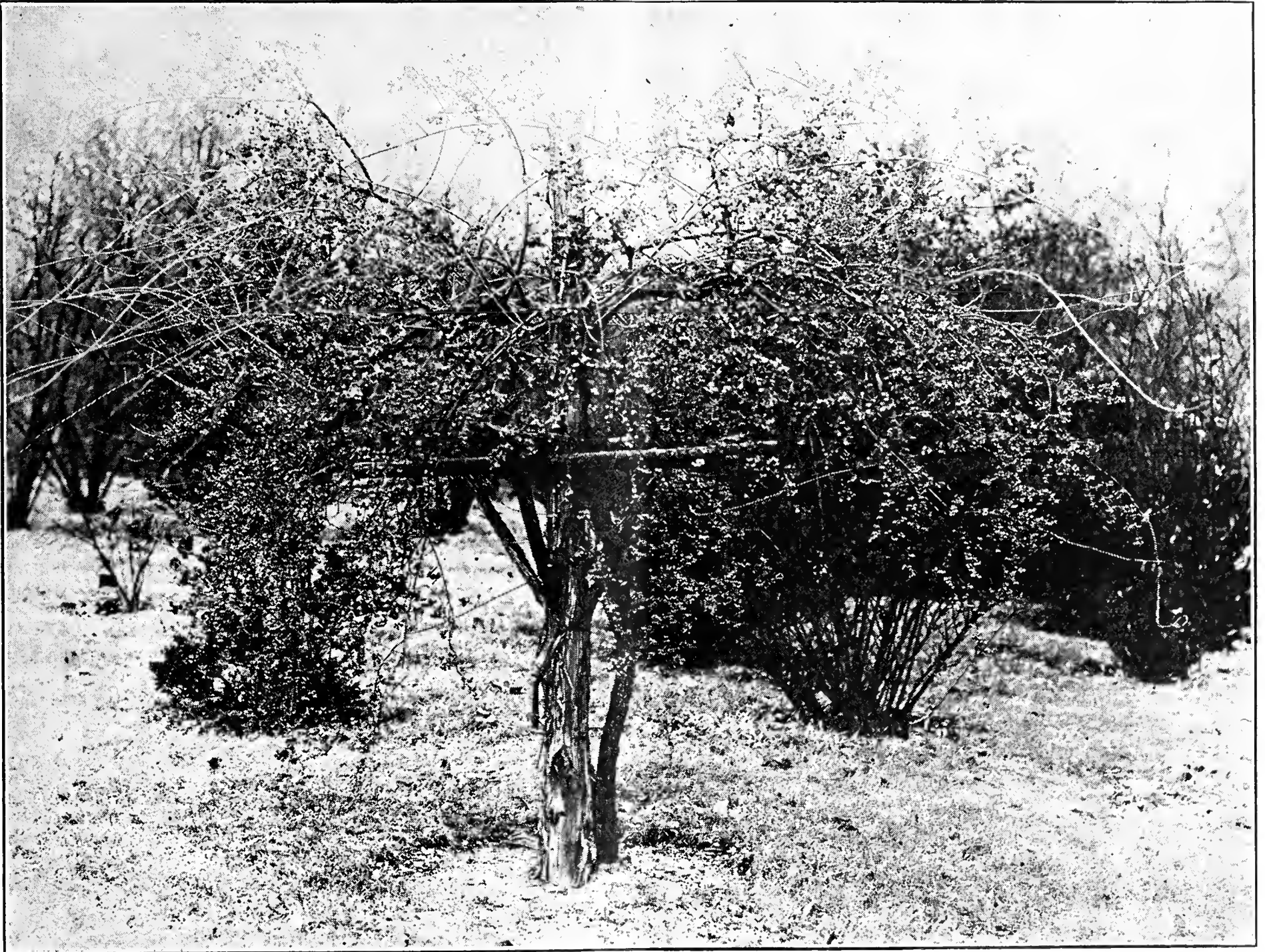
FOR GROWERS AND DEALERS IN NURSEYSTOCK
The National Nurseryman Publishing Co., Incorporated

Vol. XXVII.

HATBORO, PENNA. NOVEMBER 1919

No. 11

Celastrus Obiculatus



Celastrus grown in standard form makes a beautiful and lasting display in the fall

THE illustration does not show the beauty of the Japanese Bittersweet *Celastrus obiculatus*. When the picture was taken last November the subject stood out as one of the most beautiful plants in a very large collection.

The orange and scarlet fruit showing up wonderfully bright and vivid, contrasting so strongly with the dreary appearance of most out-door plants, as they are, in late Fall. There are many shrubs and trees that have bright fruit but very few that are lasting, either the birds take them or they fall or dry up but the fruit of the Bitter-

sweet stays on the plant and keeps its color nearly all winter, for this reason it is highly valued for cutting and using for interior decoration.

Being a shrubby vine it lends itself to training in any form desired. The particular plant of our illustration has been grown in standard form much in the same way as the Wisteria is often trained, in fact, its general habit may be said to be about the same only it does not attain such large proportions.

To form standards, it is necessary to grow single stem plants and keep them staked until the stem develops

enough to stand alone. It is also an excellent subject to plant on banks, rough ground or train on fences and over walls.

The native or False Bitter-sweet, *Celastrus scandens* is very similar to the Japanese one but perhaps is not quite so showy the fruits being produced in terminal panicles while that on the Japanese kind is in cymes along the branches but both are well worth growing.

The *Celastrus* is a vine that could be recommended a great deal oftener by the nurserymen for trellises and

fences instead of the ever present rose and clematis, the foliage is handsome, it is free growing, will thrive in dryish places and has the added advantage of being attractive in the Winter which most other vines lack. It is readily propagated from seed, which should be gathered in the Fall and sown at once or else stratified and sown in the Spring but it is a plant that is easily propagated from root cuttings, and layers. It is one of those plants that a nurseryman can take hold of, grow properly, advertise and make very popular if properly handled.

BABY RAMBLERS

THE NEWARK PRODUCTS



Paul V. Fortmiller,
Newark, N. Y.

Just "Fort"—Be sure to address his mail to Newark, Wayne County, N. Y. as he is a Jackson & Perkins product, you know, preferred stock stands for select stock, etc. etc. "nuf sed." He is all wool and a yard wide.



Wm. H. Mastin,
Newark, N. Y.

Just "Bill"—Another Newark, Wayne County product, only the firm's name is C. W. Stuart & Co., who are good growers of good goods and good graders.



F. Burnett Kelley,
Newark, N. Y.

Just "Kell"—One of this year's crop of Baby Ramblers. These Newark fellows are all off the same piece of cloth; live wires, every one of them. "Kell" is connected with the Gould Growers Corporation of Newark, N. Y.

Remember when in the Finger lake district to visit Newark; it's 32 miles from Rochester, 16 miles from Geneva and 54 miles from Syracuse, and see "Fort" "Bill" and "Kell."

Miles W. Bryant, son of A. J. Bryant, Princeton, Ills., and Ruth Amanda Kaar, daughter of Mr. and Mrs. Jacob Kaar of Princeton, Ills. were married on August 30th.

AGE OF SEED DOES NOT CAUSE DETERIORATION OF TYPE

According to the Australasian International Nurseryman, an interesting law-suit case has recently been decided in the New Zealand Courts.

A seedsman sold to a chickory grower, a seed which both seller and purchaser understood to be old seed, the purchaser taking the risk of germination. When the crop grew, a large proportion of the roots proved inferior, the seller contending that the old seed was the cause of the inferior roots, while the purchaser contended that age of the seed did not cause deterioration of type.

The Commission took evidence that the Supreme Court, Melbourne, and leading seedsmen, chickory growers, university professors and Government officials, gave evidence on both sides, finally decided in favor of the plaintiff agreeing that age of seed had no deteriorating effects on the growth of plants or roots.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

EditorERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., November 1919

Subscribers to "Nurserymen's Fund for Market Development"

ENFORCE THE LAW It would be interesting to know what action, if any, the committee on Ethics has taken under the resolution passed at the June Convention, re Nurserymen selling to Landscape Gardeners and others at prices which do not adequately protect the growers.

Are there any members on the slate for dismissal from the Association? Is the Committee too busy to attend to the job properly? Or have all the members become good?

These questions are not asked in a spirit of levity but rather to point out the futility of regulations or laws that are impracticable however desirable they may be.

Nothing weakens an organization's power for good and efficient work as rules that cannot be enforced with equal justice to all.

If the resolution was a practical one, based on equity it should be enforced to the limit, if not, it should be expunged from the minutes of the Association.

STEALING PLANTS

Judging from reports, the thief who stole the plants from the Arnold Arboretum was a plant enthusiast, very short on morality.

We can almost forgive a person who steals something because he loved it and merely wanted to add it to his collection, although we may not endorse his method of procuring it. At any rate, it is not so criminal as the vandals that go through the country destroying trees, shrubs and flowers, just because they happen to be in the country.

It is a curious thing, that any people who would not for a moment take a penny that belonged to another in the city, will not hesitate when in the country to appropriate anything that takes his fancy. They seem to think everything is free that grows, it does not matter how much labor and money it has cost the owner to produce it.

It is not the people living in the country who are so likely to forage through a nursery or orchard, appropriating any thing that takes their fancy, as it is the people who ought to know better when on automobile tours from the city.

There is only one way to stop it, that is, take the number of the machine, find out the owner, and send him a bill for the damage.

Our sympathy goes out to the Editor and Staff of the Florist's Exchange, who, on account of the Printers' Strike for the first time in thirty years, were unable to get their journal out.

There is something so ruthless in a strike, like war, they are a reaction from what is most desirable. They are an anachronism and do not fit the present stage of economic development. As soon as they belong to the past, the better for everyone, not excepting the employee.

From the Federal Horticultural Board

October 11, 1919.

Editor, National Nurseryman,
Flourtown, Pa.

Dear Sir:

I am sending you, for your information and for such public notice in the interest of your readers as you may care to give it, a revised copy of the form of application for special permit to import new varieties or necessary propagating stock as provided for in regulation 14 of the rules and regulations under Quarantine No. 37. The Board appreciate the fact that this is a rather formidable looking document and that it will doubtless be criticized as placing an unnecessary burden on importers and involving excessive red tape. That such criticism will be considered valid from the viewpoint of the ordinary propagator or plant lover is fully recognized, and the Board is very regretful that circumstances have seemed to necessitate the surrounding of these importations with all the safeguards which this application and the permit involve. Unfortunately, however, a small element of the plant importers themselves have made these precautions and safeguards necessary. The Board regrets to announce that it has found that some few of the importers at least have looked upon this Department as fair game and have undoubtedly gone forward with the deliberate intention of violating both the letter and the spirit of the regulations. The great body of the American nurserymen and florists and horticulturists will undoubtedly meet the conditions of the quarantine fairly and honestly, and if the Board had to deal with such persons only, it could undoubtedly dispense with the bonding and with many of the other restrictions referred to. If this course were possible it would vastly simplify the work of the Board and make it much more agreeable. It is hoped, therefore, that all those interested in the importation of plants and the development of horticulture in America will strain a point and give the Board this much credit.

As an illustration of what the Board meets in this work, there are quoted below the assurances which the Board received from a certain prominent importing florist. These assurances followed some considerable correspondence in which the conditions of importations under regulation 14 had been fully explained. The assurances are as follows quoted verbatim:

We assure you that these bulbs are to be used exclusively for the purpose of propagation.

We assure you that they will be propagated by us or by a grower under contract for us absolutely.

As regards the exact location where the bulbs will be grown this is something that we cannot yet announce. It may be in Long Island; it may be in Virginia; it may be in New Jersey.

We are casting about for a suitable place and we assure you that your Department will be promptly and duly advised just as soon as exact location where the bulbs will be grown shall be determined upon.

On the arrival of the shipment of bulbs which involved some 50 cases and totalled 25,000 bulbs and its inspection and liberation in New York, the bulbs were distributed, quoting from the report subsequently made to the Board by the importer, to "perhaps a hundred different people in various parts of the country." This distribution was made on a purely commercial basis to all sorts of persons with whom he had contracted to supply these bulbs. These contracts for commercial sale had been discussed by letter with this importer, and that he fully understood the situation is indicated by the paragraphs from his letter quoted above.

It should be noted that the restrictions which have been found necessary to safeguard the entry, under regulation 14 and under special permits, of new varieties and necessary propagating stock have not deterred the trades involved from making liberal use of the opportunities for importation provided by this regulation. Nearly one hundred applications have been received for these special permits and most of these applications have been grant-

ed, many of them for quantities of a single variety of 50,000 or more, in two instances 250,000. Such special permits under Regulation 14 have been issued to date for over 1,500,000 bulbs and other plants. All these requests are passed upon by the experts of the Bureau of Plant Industry of the Department and, as noted, most of them have been approved, including even the large quantities indicated. In the case of these larger importations the evidence seemed to be adequate to warrant introductions on such a large scale for the purpose of establishing reproduction plantings adequate to meet American needs. Nevertheless, the importation of plants running into these large quantities of a single kind involves the necessity on the part of the Board to keep under certain supervision and to safeguard such importations to see that the bulbs and plants thus imported are used for the purpose specified and do not get at once or within a short time into ordinary commercial channels.

The Board regrets very much that it has been necessary to make so many changes and announcements in regard to these special permits. It must in fairness, however, be recognized that this whole field is a new and untried one and that such changes must be made frequently at the outset, as our information grows, and new needs develop. Ultimately the methods will become fixed and standardized and undoubtedly more easily workable. The object of the Board will be to try to keep the requirements as plain and simple as possible and yet extend the protection which will be demanded, not only in the interest of the efficient administration of the quarantine, but also in the interest of the individuals who are earnestly going forward to develop production in the United States of plants which have hitherto been largely imported.

The explanation of the provisions for the entry of new varieties and propagating stock under Quarantine No. 37 has been issued as Circular Letter 105, revised July 28, 1919. Paragraph 4 in this Circular Letter reads as follows:

This application points out the condition that if the applicant has requested the importation of larger quantities of stock than can be housed and cared for in the inspection houses of the Department of Agriculture, he will be required to provide local storage in Washington for such material during the period of detention for examination and, if necessary, provide also for the cost of disinfection. Small shipments which can be easily handled will be repacked without charge and the original containers will be employed for such repacking wherever possible, but the importer will be required to meet the cost of such repacking and of new containers when such are necessary.

It was anticipated that importations under regulation 14, being essentially for introduction purposes, would be for the most part of small bulk and that the Department could, therefore, handle most of them without much, if any, additional cost to the importer. When it became evident that advantage would be taken of regulation 14 to bring in shipments of huge size, running perhaps into carload shipments, it became necessary for the Department to require the importer to meet all necessary costs. The Board has in mind a plan which it would like to put into operation with importers which will be a distinct aid to those whose importations are of considerable bulk, namely, to undertake to arrange with some local transfer and storage company to act as the agent of the importer and to remove these importations from the Custom House, Georgetown, to suitable quarters for their inspection and, where necessary, disinfection and, after inspection, to attend to the shipment of the goods to destination. The Board can probably provide an expert horticulturist to supervise the work, but it would prefer to have the trades involved furnish their own agent who would remain temporarily or permanently in Washington for this purpose. In the case of very large importations by a single person or firm, it may be desirable for such person or firm to provide his or their own agent to supervise such handling and safeguarding of the importation pending its inspection, certification, and bonding.

The form of the bond to be required will be issued in a few days. It will be based on the very simple bonding system which has been long used by the customs officials in relation to imported goods shipped in bond or held in bond for any purpose. While the legal phraseology may seem formidable, the system is simple enough and involves no risk and comparatively little expense to a man who has no other intention than to comply with the conditions under which the importation is authorized.

Yours very truly,

C. L. Marlatt

Chairman of Board.

Forms of application can be obtained by addressing the Federal Horticultural Board, Washington, D. C.—Ed.



What we may expect if the health of the people as well as plants is given in charge of the Federal Horticultural Board

HALESIA TETRAPTERA, VAR. MONTICOLA

The Silver Bell tree of the southern states, *Halesia tetraptera*, has long been cultivated in northern gardens. It is usually shrubby in habit with several stout wide-spreading stems, and here at the north, rarely grows more than fifteen or twenty feet high. It is an inhabitant of the southern states from West Virginia to southern Illinois, northern Florida and eastern Texas. It grows at low altitudes and does not appear to ascend to the slopes of the high Appalachian Mountains, although the *Halesia* of those mountain forests was long considered identical with the lowland tree. The *Halesia* of the high slopes, however, is a tree often eighty or ninety feet high, with a trunk three feet in diameter, sometimes free of branches for a distance of sixty feet from the ground. It is apparently only in recent years that this mountain tree has been introduced into cultivation by the Biltmore Nursery.

The mountain tree which has lately been distinguished as var. *monticola* grows as a tree from the time the seed germinates and the seedlings show no variation of habit. Young trees are clean stemmed with short branches which form a narrow pyramidal head. The leaves are of rather different shape and less hairy than those of the lowland tree; the flowers are fully a third larger and the fruit is nearly twice as large. Trees less than ten feet produce flowers and fruit in abundance. There is now every reason to believe that the mountain *Halesia* will prove one of the handsomest flowering trees of large size which it is possible to cultivate in this climate. Its tall trunk and narrow head suggest that it may prove a good street and roadside tree.

Nurserymen in past years used to worry about the brush pile, whatever else they may have to worry about, it is not likely to be a brush pile this year or for several years to come. Judging from the demand for nursery stock, it is not a case of who quotes the lowest price but who has the stock? The price is only a secondary consideration.

Princeton Products are Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

November First

1919

Scarcity of Stock

makes our offer of choice shade trees and shrubs

Interesting Reading

We offer in assorted sizes Norway and Sugar Maples, Horse Chestnut, Catalpa Bungei, European Sycamore, American Elm.

In shrubs Althea, both bush and tree shape; Cornus Siberica; Deutzias; Hydrangea P. G.; Kerria Japonica and Japonica Variegated; Philadelphus assorted; Prunus Pissardi; Golden Elder; Spirea Opulifolia Aurea, Thunbergii and Van Houtte.

In evergreens Douglas Spruce, White Spruce, Norway Spruce; White and Scotch Pine; Retinospora Picifera and Picifera Aurea, Plumosa and Plumosa Aurea; Arbor Vitae Columbia, Compacta, Ellwangeriana, Lutea, Siberica and Siberica Lutescens.

W. B. COLE

Painesville - - Ohio

1857

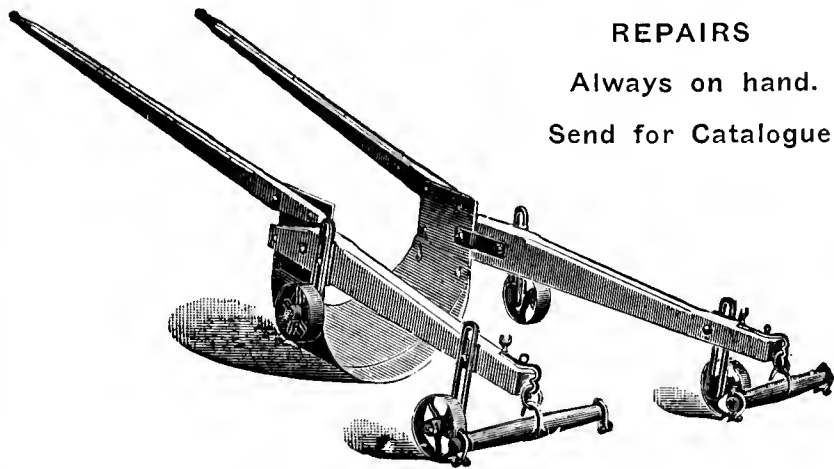
1919

BRAGG'S COMMON SENSE TREE DIGGER

REPAIRS

Always on hand.

Send for Catalogue



Digger gets All the Roots at the rate of Twenty to Forty Thousand trees per day, and only needs same power as plow.

L. G. BRAGG & CO.

KALAMAZOO, MICH.

Are You Troubled

with lost or "astray" shipments of nursery stock, to say nothing of other difficulties experienced through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a reputation for giving you "what you want when you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

West Chester, Pennsylvania

A Nurseryman's Relation With His Customers

Written for the Bulletin of the Garden Club of America by J. Edward Moon

It seems to me there is only one way to view this subject—if a nurseryman is expecting to build an enduring and profitable business—and that is to look at our relations in the light of the Golden Rule, which is to “Do unto others as you would that they should do unto you.”

Most nurserymen, despite criticism sometimes aimed at them, do try to do this. Perhaps they fall short of this ideal relationship with their customers most, because they are judged in comparison with the relationship of department stores or mercantile establishments and their customers. The complete satisfaction of such relationships is impossible in the nursery business, for weather conditions interfere, the protection of standards and quality of brands by copyright or patent is not given the grower, and, besides, his product is perishable—hence the uniformity in manufacturing processes is not possible.

Consider the elements in the production of nursery stock—soil, time, weather, and labor.

Soil affects vitality. With scientific analysis it is largely amendable to a plant's requirements, when properly fertilized, drained, or cultivated.

Time, that element in the production of nursery stock calling for a sense of prophecy—that two, five, ten, or even twenty years hence, the plant propagated and grown will be wanted, and in the quantity produced. Time is the element a nurseryman must have to produce Boxwood, Rhododendron, and other slow growing plants that have, prior to the promulgation of Quarantine Order No. 37, come from abroad. Time is a nurseryman's legitimate excuse for not having in supply the rare and interesting plants your garden magazines proclaim from the Orient, or elsewhere. He must first have time for the plant to prove its hardihood and characteristics in the land of its adoption, and until these are proven a nurseryman is not justified in investing his money in its production. The ability later to supply the plant depends on the ease with which it is reproduced and grown. Thus it is apparent that no such sudden production of new or unusual nursery products is possible now to fill the void left by the plant exclusion act, as was possible in the prompt manufacture of new or unusual articles—such as dyes—during the recent war-time.

Weather is an element which, if favorable, shortens the time required for production. It is a variable element that makes uniform quality impossible.

Labor is the most costly of all the requirements in the production of nursery stock. Those employed in the nursery industry are as efficient, or as inefficient, as those to be found anywhere. Assuming proper management, the efficiency of labor is responsible for much that makes a nurseryman's relationships with his customers satisfactory—such as the digging of the plants with good root systems, packing them carefully, etc. This labor is rightly being paid today commensurately with wages in other industries, and the reflection of such wages will be felt in the price of nursery stock for some time to come. It is labor that often carelessly, or unknowingly, confuses or

ignores labels and mixes names, which results in untrue varieties. This has probably brought more ill repute upon nurserymen than any other fault with which we are accused. The accusation is rightly brought, for such errors are due to human fallibility, against which every precaution should be taken, and which can not be attributed entirely to causes beyond control, as the elements of time or weather. The unscrupulous practices of any nursery agent are equally harmful, and equally defenseless. The customer has a right to expect his nurseryman's protection against any such misrepresentation on his own, or laborer's part, regardless of whether employed in the field or on the sales force.

A knowledge of these problems of the nurseryman on the part of his customers will help to better relationships. Conversely, an equally clear understanding of the customer's problems will help the nurseryman to give satisfaction.

The planter who tells his nurseryman fully of his requirements—as he would tell his lawyer or architect—can, from the right kind of nurseryman, get expert opinions upon what to plant, and how to plant and care for it. Many nurseries have service departments in which are experts on fruit culture, or landscape gardening. These men go exhaustively into a customer's planting problems and helpful, reliable assistance is given generously. Such personal service to a customer's requirements costs nurserymen money, and the sales costs of growers unequipped to render this assistance are naturally less, which difference is, of course, reflected in the prices.

The lamentable lack of sufficient gardening knowledge on the part of many buyers leads them to the snare of “cheapness of price,” hence nurserymen seeking to provide the reliable service planters need, find all too frequently that advantage is taken of their ability and willingness to supply this reliable assistance, after which the stock is purchased from a “cheaper price” nursery, which carried no burden for service rendered. It is because customers fail to support adequately with their patronage the grower who provides such service, that there are not more firms so equipped. Insane competition that results in underselling, and the buyers relish for a “bargain” are always tending to eliminate the courtesies and service many wish to give, for, contrary to popular opinion, service is not something given for nothing, but prompt, intelligent attention to a customer's requirements, which only a contented, well paid organization can provide.

Guaranteeing nursery stock to grow is a factor in relations with a customer upon which we do not all agree. There are nurserymen who will assume no responsibility at all. There are others who will supply new plants to take the place of those which die. Between these extremes is a middle course, probably more equitable to both buyer and seller. This is the policy of replacing trees that fail to grow at one-half the price originally paid. Why should a nurseryman do more? Planting,

ROSES! ROSES! ROSES!

CALIFORNIA FIELD GROWN--The Kind That Will Satisfy Your Customers

Our roses are grown on disbudded Mauetti stock, under ideal soil and climatic conditions for the development of high class plants.

Repeat orders from our customers from year to year are evidence of the high quality of these plants.

The following list contains the main items we have to offer. We have smaller amounts of many varieties not listed here, so don't fail to list any items you are in need of. We may be able to supply the amount you want.

Send your list today for prices, and take advantage of this assortment.

Orders from unknown correspondents must be accompanied with remittance or references.

VARIETIES

2000 Agrippina	500	George Arends	70	Mrs. A. R. Waddell	
100 American Beauty	300	George C. Waud	50	Mrs. Charles Hunter	
400 *American Pillar	750	George Dickson	1200	Mrs. Charles Russell	
300 Anna de Diesbach	250	Gloire de Chedane	200	Mrs. David Jardine	
300 Antoine Rivoire		Guinoisseau	50	Mrs. Frederick W. Vanderbilt	
Arthur R. Goodwin	200	*Gloire de Dijon		Mrs. George Sawyer	
400 Augustine Guinoisseau	800	Gloire de Margottin	300	Mrs. Herbert Hawksworth	
50 Austrian Copper	250	Gloire Lyonnaise	75	Mrs. Herbert Stevens	
300 Baby Rambler		*Gold of Ophir		Mrs. John Laing	
*Banksia Double White		Gorgeous	75	Mrs. Myles Kennedy	
*Banksia Double Yellow	100	Grace Molyneaux	1200	Mrs. R. G. Sharman	
*Banksia Single White	750	Gruss an Teplitz		Crawford	
400 Baroness Rothchild		H. V. Machin	200	Mrs. Sam Ross	
750 Beate de Lyon		Hadley		Mrs. Wakefield Christie	
200 *Beauty of Glazenwood	600	Harrisoni	100	Miller	
(Fortune's Yellow)	150	Harry Kirk	500	Mrs. Wemyss Quinn	
800 Belle Siebrecht		Helen Gould (Baldwin)		My Maryland	
Bessie Brown	400	*Hiawatha	75	Naarden	
800 Betty	200	Hoosier Beauty	100	National Emblem	
*Billard et Barre	1000	Hugh Dickson		Niles Cochet	
150 Black Prince	200	Improved Rainbow		Old Gold	
400 Bridesmaid	1100	Irish Elegance		Ophelia	
200 British Queen	300	Irish Fireflame	300	Ophelia Supreme	
300 Captain Christy	150	J. B. Clark	1500	Papa Gontier	
75 Caroline Goodrich	50	Jessie	400	Paul Neyron	
200 Chateau de Clos Vougeot	400	Jonkheer J. L. Mock	350	Peach Blossom	
100 Cherokee Double White	200	Joseph Hill	2000	Perle des Jardins	
Cherokee Single White	500	Jubilee		Perle d'Or	
75 Chrissie MacKellar	750	Juliet	600	Perle von Godesburg	
150 Clara Watson	950	Kaiserin Augusta Victoria		Pharisaer	
Cleveland		Killarney	150	Philadelphia Rambler	
125 *Cl. American Beauty	200	Killarney Brilliant	300	*Pink Cherokee	
500 *Cl. Belle Siebrecht	800	Konigin Carola	150	Pink Moss	
120 *Cl. Bridesmaid		La Detroit	400	Prima Donna	
*Cl. Captain Christy	75	Lady Ashtown	300	Prince Camille de Rohan	
750 *Cl. Cecile Brunner	350	Lady Battersea	750	Prince de Bulgarie	
50 *Cl. Devoniensis	300	Lady Dunleath	120	Queen Mary	
*Cl. Etoile de France	100	*Lady Gay	25	Radiance	
400 *Cl. Kaiserin	150	Lady Hillingdon	200	*Ramona	
400 *Cl. Papa Gontier	750	Lady Ursula	100	Rayon d'Or	
500 *Cl. Perle des Jardins	125	La France	700	Red Letter Day	
*Cl. Pink Cochet	1000	*Lamarque		Red Maman Cochet	
350 *Cl. Souv. de Wooton	300	Le Progres	600	(Niles Cochet)	
750 *Cl. Testout		Leuchtfeuer		Red Radiance	
700 *Cl. White Cochet		Liberty	150	*Reine Marie Henriette	
50 Chio	573	Lieutenant Chauré	50	*Reve d'Or	
Colleen	25	Los Angeles	350	*Reine Olga de Wurtemberg	
Columbia	250	Lyon	250		
Constance	750	Mabel Morrison			
50 *Crimson Rambler	150	Mad. Abel Chatenay	50		
500 Dean Hole	300	Mad. Alfred Carriere	600		
*Dorothy Perkins	300	Mad. Caroline Testout	650		
250 Dr. William Gordon	2500	Mad. Colette Martinette	50		
125 *Dr. W. Van Fleet		Mad. Edouard Herriot			
800 Duchess of Albany	2000	Mad. Hoste	800		
400 Duchess of Sutherland	200	Mad. Jenny Guillemot	100		
40 Duchess of Wellington	150	Mad. Jules Grolez	1200		
*Duchesse de Auerstaedt	175	Mad. Leon Pain	200		
300 Duchesse de Brabant		Mad. Ravary	100		
250 Earl of Dufferin		Magna Charta	750		
50 Edith Part	1500	Maman Cochet	150		
750 Edward Mawley	500	Marcella	25		
125 Elizabeth Rowe	50	*Marechal Niel			
175 Erna Teschendorff	700	Margaret Dickson	2500		
575 Etoile de France	700	Margaret Dickson Hamill	100		
250 Etoile d'Or	25	Marie Van Houtte	450		
300 *Excelsa		Marquise de Sinety			
300 Farbenkonigin		Melody	200		
250 Fisher Holmes	250	Mildred Grant	700		
50 Francis Scott Key	140	Minnehaha	300		
100 Franciska Kruger	100	Miss Alice de Rothschild	50		
175 Franz Deegen	50	Miss Kate Moulton	250		
3500 Frau Karl Druschki	200	Mlle. Cecile Brunner	100		
50 *Gainsborough	300	Molly Sharman Crawford	300		
700 General Jacqueminot	500	Morning Glow	100		
General Jeff	250	Mousseline (Moss)			
600 General MacArthur	150	Mrs. Aaron Ward			
75 General-Supt. Arnold	150				
Janssen	100				

Standard or Tree Roses

When we budded our Standard Roses last year we had a number that did not make up to proper sizes for sale. We also had a number of plants that were budded at various heights, varying from twenty-four to thirty-six inches. We will be glad to give information as to the height of the head when orders are placed, if the purchaser desires.

20 Anna de Diesbach	
10 Baby Doll	
5 Baby Rambler	
12 Betty	
60 Bridesmaid	
5 Catherine Mermet	
60 Cl. Kaiserin	
70 Cl. Mlle. C. Brunner	
10 Cl. Belle Siebrecht	
100 Cl. Papa Gontier	
40 Cl. Perle des Jardins	
25 Duchesse de Brabant	
75 Empereur du Maroc	
10 Franz Deegen	
100 Frau Karl Druschki	
20 Gainsborough	
34 General MacArthur	
75 Gloire de Margottin	
10 Gold of Ophir	
5 Gruss an Teplitz	
55 Hoosier Beauty	
5 Hugh Dickson	
50 Improved Rainbow	
Irish Elegance	
Irish Fireflame	
150 Kaiserin Augusta Victoria	
5 Lady Battersea	
125 Lady Hillingdon	
5 La France	
90 Liberty	
100 L'Ideal	
12 Los Angeles	
40 Lyon	
5 Mad. Abel Chatenay	
200 Mad. Caroline Testout	
30 Mad. Ched. Guinoisseau	
20 Mad. Ed. Herriot	
30 Magna Charta	
20 Maman Cochet	
100 Marechal Niel	
50 Marie Van Houtte	
90 Marquis de Querhoent	
20 Mrs. John Laing	
80 Mrs. Charles Russell	
25 Niles Cochet	
150 Ophelia	
25 Papa Gontier	
25 Paul Neyron	
100 Perle des Jardins	
50 Reve d'Or	
50 Rhea Reid	
10 Radiance	
50 Rose Queen	
5 Safrano	
75 Sunburst	
60 Sunset	
60 The Bride	
75 Ulrich Brunner	
60 White Maman Cochet	
30 Wm. A. Richardson	
10 Yellow Maman Cochet	

CALIFORNIA NURSERY COMPANY, Inc.

NILES

CALIFORNIA

(Established 1865)

When writing to Advertisers please mention the National Nurseryman.

maintenance, and weather conditions, vitally affect newly planted nursery stock, and these are conditions beyond a nurseryman's control. Agreeing to replace without cost has, in many instances, led to neglect of a plant's needs by the customer,—for either he or his gardener argues that the nurseryman is responsible, so why disturb the plant,—when a little watering or cultivation at the proper time would have saved it. How can a customer's tree succeed, if it does not annually, or as often as is necessary, have the attention it requires, just as any other living organism must have its requirements met if it is to survive?

A natural question to arise in the mind of a customer is "How, then, am I to know the nurserymen with whom my relationships are to be most satisfactory?" The reliability of the firm dealt with is, perhaps, the best assurance.

Nurserymen have, however, of themselves, thrown about membership in the American Association of Nurserymen certain requirements for reliable and honest dealings by which their members are expected to abide, though the Association does not stand responsible for the transactions of the membership. A list of the nurserymen who have been admitted to this Association can be had by application to the Executive Secretary, Mr. John Watson, 400 Nassau Street, Princeton, N. J.

WEST VIRGINIA UNIVERSITY

The Agricultural College of the West Virginia University, Morgantown, W. Va., sent us a copy of a booklet issued recently, showing a collection of views of the college, which have been distributed to prospective students. Judging from the booklet, students should have every cause to be proud of their alma mater.

Its equipment is ample for a good training in the various phases of horticulture. Dr. J. K. Shaw of the Massachusetts Agricultural College has been appointed head of the Department to succeed Professor W. H. Alderman, who is Chief of Horticulture in Minnesota.

Morrisville, Pa., October 23, 1919.

Editor, National Nurseryman,
Flourtown, Pa.

Dear Sir:—

I am in receipt of a letter from Mr. Leon Estabrook, Chief of the Bureau of Crop Reports, Washington, D. C., that he has presented to Secretary Houston, the Nurserymen's request for an appropriation of \$50,000 with which to secure Crop Reports.

Secretary Houston demurred at this item in the budget at first but when Mr. Estabrook explained that officials in the Department and the American Association of Nurserymen wanted such statistics, the Secretary consented to leave the item in the budget which now goes to Congress at its next session which convenes in December. Thus it looks as if progress in this important matter is being made.

Very respectfully,

J. EDWARD MOON,

President of the American Association of Nurserymen.

HOW AND WHEN TO PLANT

Frederick W. Kelsey in the New York Evening Times

The excellent editorial in Sunday's Times, "Tree Planting Time," is both timely and practical. Too much credit can hardly be given to the American Forestry Association and to its President, Charles Lathrop Pack, for the public service they have rendered in favoring the planting of suitable memorial trees. Not even marble, bronze or granite can be more appro-

priate or effective. A growing tree reflects growth and development, both in size and beauty, rather than tarnished deterioration such as nature at once applies to every other form of memorial expression. "The trees are growin' while y're sleepin'," as the Scotch bard long ago remarked.

The reference in your editorial that "no tree that has not a diameter of two inches measured a foot above the ground" should be planted is subject to modification as to conditions. In many places smaller trees are not only less costly but more desirable as well. It is an apt and trite saying that, the more experience tree planters have, the smaller trees they select for the best future results.

One of the most successful tree planters in the country frequently stated that he was not so particular about the size of a tree as he was to get the right kind of a tree in the right place and with a preparation of the soil that made what was below the surface of the ground of fully as much or more importance than the size of the tree or what was above the ground.

This contention is fully borne out by practical experience everywhere. The reverse condition and lack of care of the trees afterward accounts for the failure of many trees in our parks, parkways, and public streets all over the country. A tree an inch in diameter under favorable conditions of soil, planting, and care may be vastly more valuable and satisfactory for any planting than larger trees where the environment or conditions are not favorable. Younger trees, as with younger natural growth generally, more readily adapt themselves to the results of the "surgical operation" of transplanting.

In Paris and other European cities, and in Chicago and other American cities and on many country estates, very large trees are successfully moved and transplanted where conditions permit.

In the States where Municipal Shade Tree Commissions have been authorized, as in New Jersey, where there are now about fifty city, village and town commissioners with full authority to plant and care for the trees in the public streets, the trees usually selected are from 1½ to 2½ inches in diameter, immediate effect being one of the objects desired. In the larger cities heavy expenditures are made to insure effective lines of street trees all through the resident portions. Newark has expended from \$40,000 to \$60,000 annually for this purpose for a number of years, and next to Washington is now perhaps the best tree-planted American city.

As a rule, trees taken from the woods rarely succeed as well as nursery-grown or cultivated trees. The reason is obvious. The soil conditions are entirely different. And in the woods the growth of a young tree is protected on all sides by the surrounding trunks, branches, and foliage. The removal for outside planting is therefore to a wholly changed environment, affecting both root and branch. Indeed, this change is usually so marked as to either kill the removed tree or permanently retard its growth and development.

Autumn planting is frequently preferred to deferring the work until Spring, and most of the hardy deciduous trees succeed as well from Fall planting—such as the elms, hard maples, lindens, ginkgo, horse chestnuts, etc. But there are exceptions. Nearly all of the beautiful magnolias persist in dying from Autumn planting and even the silver-leaved maple rarely succeeds as well when moved in the Fall as when transplanted in Spring.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC.

Required by the ACT OF AUGUST 24, 1912

Of the NATIONAL NURSERYMAN published monthly at Hatboro, Pa., for October 1st, 1919.

Editor,—ERNEST HEMMING, Flourtown, Pa.

Managing Editor,—None.

Business Manager,—THOMAS B. MEEHAN, Mt. Airy, Phila., Pa.

Publisher—NATIONAL NURSERYMAN PUBLISHING CO., INC., Hatboro, Pa.

Owners:

Mrs. Nellie B. Yates, Rochester, N. Y.

James McHutchison, Jersey City, N. J.

Thomas B. Meehan, Mt. Airy, Phila., Pa.

Albert F. Meehan, Mt. Airy, Phila., Pa.

Known bondholders, mortgagees, and other security holders, holding 1 per cent or more of total amount of bonds, mortgages, or other securities. NONE.

THOMAS B. MEEHAN, Business Manager.

Sworn to and subscribed before me this 8th day of October, 1919.

Elmer Miller, Notary Public.

6765 Germantown Ave.

(My commission expires March 11, 1921.)

Vincennes Nurseries, W. C. REED, Prop. VINCENNES, - - INDIANA

Cherry 2 Year Usual Supply.

Demand very heavy no more Car lots to offer, can furnish limited amounts in assorted Orders.

Cherry, One Year

Thrifty and nice, will only dig limited number. Not as heavy as usual owing to cold April. Will make excellent two year. Prefer to carry over if our customers will let us.

Peach, One Year

Limited amount in assorted Orders only.

Apple 2 Year

General List Leading Varieties in limited quantity.

Hardy Nut Trees

Grafted and Budded Pecans, English Walnuts and Grafted Black Walnuts in the best Varieties.

Trade List now ready.

Subscribers to "Nurserymen's Fund for Market Development."

Hill's Evergreens

SINCE 1855

Complete stock of leading varieties in Firs, Spruce, Pines, Arborvitae's, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

The D. Hill Nursery Co., Inc.

Evergreen Specialists.

Largest Growers in America.

Box 401, Dundee, Illinois

FAIRFIELD NURSERIES FRUIT AND SEED FARMS

I have sold all the stock I will have this Spring, but this Summer I will be ready to book orders for Fall, 1919 and Spring 1920 delivery.

The war is over and good times are ahead. No more guns or ammunition will be needed, but you will want more of my Grape Vines, Scarlet and Crimson clover and Cow-Peas than ever before.

Keep me in mind.

CHAS. M. PETERS

P. O. Address Salisbury, Wicomico County, Maryland.
Long Distance 'Phone and telegraph, Salisbury, Maryland.

THE WESTMINSTER NURSERY J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Fall 1919

250,000 Cal. Privets in grades, 1, 2, and 3 yrs.

300,000 Asparagus, 2 and 3 yr., Asst.

Barberry Thun., 18-24 in. and 2-3 ft.

Lombardy Poplars in grades 6 to 16 ft.

Oriental Planes in grades 6 to 12 ft.

Tulip Poplars, 6-8 ft.

Horse Chestnuts in grades 7 to 12 ft.

Catalpa Speco in grades 8 to 12 ft.

Butter Nuts 4 to 8 ft., in grades.

Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft., Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft. and 4-5 ft., Hydrangeas P. G., 2-3 ft. Write for Prices.

Willowdale Nurseries KENNETT SQUARE, PA.

WE OFFER FOR FALL 1919

100,000 Privet in sizes from 2 to 5 ft.

Oriental Planes, American Elms.

Norway, Sugar, Sycamore and Silver Maples.

Pin and Red Oaks.

American, European and Silver Linden.

White Dogwood, Horse Chestnuts and Lombardy Poplars.

Salisburias and Tulip Trees.

Butternuts, Filberts, Walnuts and Pecans.

Evergreens and Shrubbery in good assortment.

Have many large Shade Trees in caliper from 3 to 8 inches.

Send list of wants for prices.

THE RAKESTRAW-PYLE CO.

KENNETT SQUARE

PA.

We are now ready to quote lowest prices on FRUIT, SHADE AND ORNAMENTAL TREES, SHRUBS, EVERGREENS, VINES and HERBACEOUS PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries Sparta, Ky.

For FUMIGATION With HYDROCYANIC ACID GAS "CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

Small Fruit Plants and Shrubbery for the Wholesale Nursery Trade.

P. D. BERRY & SONS

Dayton

Ohio

Summer Planting and a year around income

*Read before the South Western Association of Nurserymen by W. C. Griffing, Prop.,
Griffing Nurseries, Port Arthur, Texas.*

DON'T all say at once "Impossible"—I forget just whose definition it was, but somebody defined impossible as something very difficult for the ancients. When you look into the differential of an automobile, it is then that you think all things possible. Summer planting is not only possible, but the biggest asset to any nurseryman's business.

Bare-rooted trees cannot be transplanted after the sap has come up, but when trees are taken up with a ball of earth intact the roots, they can be handled at any time of the year, it matters not what season.

Most of us are familiar with balling and burlapping as this process is called. For the benefit of those who are not, it is one of the most wonderful adventures, in the nursery and landscape business. A tree, shrub or plant is dug without disturbing the roots. Growth continues just as though that tree or plant had never been moved from the earth in which it originally grew. The surrounding earth which is lifted intact (the roots) yields nourishment and serves as protection for the roots until the tree or shrub is transplanted.

We used to think, as many do now, when we were digging stock bare-rooted and getting from 15 to 25¢ for a peach tree, that when the sap went down, we could commence digging and when the sap came up in the spring, our season was closed. We would then cut half or more of our office and field forces, (in that way, letting trained help go), stop planting until the following November and then break in a new bunch of help.

Nursery business is divided into departments:—Fruit, Ornamental, and so on. And, there are different methods in selling. Some sell through direct Mail-Order Trade; some through salesmen on the road, and then, there is a general line of landscape planting locally that every nurseryman and florist has to take care of. Summer planting applies principally to the Ornamental Department; and to those who have or should have the Landscape Department connected with their establishments.

We are looking to the moneyed men for our long profits and not the old-time buyer who planted four peaches in his back yard and three sycamores on his front walk. And, with the big man, his fancies come and go over night, and when he gets the home bee in his bonnet, then is the time we want to reach out and be of service to him in improving his surroundings, even though it is the first of August.

You may come back at me, and say that there is something in our coast country atmosphere or climate that permits us to move this stock at this time of the year, but it is far from such. With us, we move our stock directly from the field to the yard, with hardly any losses. In the event that it is a failure with you, try the next best way of defoliating about one-half—place in the packing shed and keep damp from one to three weeks until new roots form in the ball of earth. Another good method is to ball and burlap the stock prior to the months of April and May

and place this stock in a lath house or packing shed, heeled in shingle or hay (the tops should be kept well sprinkled). Then, just do enough planting on your jobs to cinch them and keep your labor busy and your customer happy.

When stock is handled in this way, the plants go to your customer with leaves on them, and he likes that immediate effect in the appearance. He feels much better about the spireas, altheas, Crepe Myrtle and many other of our deciduous shrubs than he would if they were put out in the winter months, without a leaf on them. And, there is a great advantage in planting evergreen trees and shrubs in summer, for they will live much more readily, when planted in the warm ground. By the time you get your customers job finished up, in January that you started in July (mid-summer), the bushes that have already been put in have made, under the increase of water and attention given them, a good growth, and they are in a much better position to stand the following Spring's drought, than if they had been planted during the winter months, and your man immediately becomes interested and the consequences are that in the windup, he thinks he has done as much towards the building and beautification of his place as yourself, and there is an interest manifested that makes him happy.

I feel as though a commercial salesman could come along and lay before you something as a side line that would care for your labor situation in the summer, most of you would take on an expenditure of from one to five thousand dollars in enlarging your business to take this on. Now, I have a far different proposition; your packing sheds are built; your help is already lined up; your trees and bushes are grown, and instead of investing that one to five thousand dollars, let's get on the job, with a little close observation, and give it a thorough and fair trial.

Our very prettiest yards are planted in mid-summer and people think us kind-of-strange and wonderful; for a few years back, they could not conceive the idea of planting a very big bush or tree even in the winter, to say nothing of the summer.

I used to feel like I wanted to carry my catalog in my inside pocket, because I didn't care to have some people I saw come and go, know that I was in the nursery business. But today is different,—people are traveling and seeing pretty plantings. It is a topic of conversation at tea parties, and the "Ladies' Home Journal," "The Home Beautiful," and other papers of their type are devoting from one to five pages and it is getting to be a real profession.

The average old tree salesman can't go out and interest a man in a \$2,500.00 planting. For these reasons, it is up to us to put our whole hearts and souls into the business. Study ourselves and teach our employees in open discussion. Teach them to speak of the *Acuba* as a very pretty little plant from the Himalaya Mountains in Asia, and the *Cedrus deodara* as the little cedar that Kipling

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.

Ornamental Nursery Stock

TREES, SHRUBS, EVERGREENS,

VINES and HERBACEOUS PLANTS

Large assortment. Long list of varieties and sizes

Get our New Trade Catalogue,—ready September.

Spring price list out of date.

Thomas B. Meehan Co.

WHOLESALE NURSEYMEN,

DRESHER

PA.

Subscribers to "Nurserymen's Fund for Market Development."



BEEMAN

1 HORSE TRACTOR

It Plows, Cultivates, Harrows,
Mows, Does 1 horse work at
½ horse cost. Successfully
operated by unskilled la-
bor. Thousands of
pleased users. Does
not pack ground.
Turns sharp cor-
ners, goes
close to fen-
ces. Use-
ful the
yr. ar-
ound.

\$285

f. o. b. Write for interesting
Factory free booklet giving full in-
formation.

Beeman Garden Tractor Co.

357 Sixth Avenue

South Minneapolis, Minn.

We will be pleased to make you prices on any of the fol-
lowing stock, well grown, well dug and well packed:

8000	Spirea Van Houtte	2-3 ft.
7000	Spirea Van Houtte	3-4 ft.
2000	Polish Privet	2-3 ft.
500	Purple Lilac (stocky)	3-4 ft.
1000	Lonicera Belle Albida	2-3 ft.
300	Golden Elder	2-3 ft.
200	Cornus Siberica	2-3 ft.
300	Snowball	2-3 ft.
	European White Birch Low branched	6-8 ft.
	Box Elder	6-8, 8-10, 10-12 up to 2 in.
	European Mt. Ash	5-6 and 6-8 ft.

The Coe, Converse & Edwards Co.

FORT ATKINSON, WIS.

CHAMPION NURSERIES, Perry, Ohio

Offer the Following Stock

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6. to 8 ft.,
8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4
ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet,
California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor
River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair
stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa
Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio

F. & F. NURSERIES

Springfield, N. J.

Our SPECIALTY

Growing evergreens for lining out on contract.

CANNAS

A large stock of several varieties. Prices right. Let us
book your order now for shipment at proper time.

PARKER BROS. NURSERY CO.

FAYETTEVILLE,

ARKANSAS

NURSEYMEN

Florists and Seedsmen

Headquarters for first-class help, furnished free of charge
to employers. Tractor hands, teamsters, general men for
farms, single and married, all nationalities.

Phone Main 5074

DIAMOND AGENCY

557 W. MADISON STREET,

CHICAGO, ILL.

IBOLIUM THE NEW HYBRID

(L. Ibota x Ovalifolium) Now sent out for the first time.

The Elm City Nursery Co. Woodmont Nurseries, Inc. New Haven, Conn.

Introducers of BOX-BARBERRY, well rooted summer frame cuttings,

Inquire for further information. Nov. 25th delivery

HARDY PRIVET



When writing to Advertisers please mention the National Nurseryman.

writes so many pretty stories about, and so on. You you know as well as myself, and the fact has never been different, that if you don't more than your customer, you stand a mighty poor chance of getting his attention.

Comparatively speaking, there are only a few landscape gardeners and nurserymen so far, who have adopted the practice of summer planting. But, it is rapidly coming to the front.

Austin, Texas, October 11, 1919.

The National Nurseryman,

Flourtown, Pa.,

Gentlemen:

We value the August copy of the National Nurseryman most highly because of the article on Propagation and Growing of Roses, by E. G. Hill.

Articles of this sort are what a great majority of nurserymen want. Of course, they must be written by successful experts—men who have successfully done these things. One article of this sort in each issue of your paper, or any paper, explaining in detail the propagation and culture of plants grown by the general nursery trade would be of inestimable value to nurserymen.

Many of us grow plants and handle them perhaps for years and yet possibly not in the most successful way. It would be worth a great deal to such nurserymen to get the facts from men who have succeeded along these various lines.

These are things that the wisest editors in the country cannot give to nurserymen from their own pen. It must be done by men who have actually worked it out.

Mr. Hill was eloquent on the beauty of roses, the different strains and varieties; but on "Propagation" while covering the ground, he was a little brief.

EUGENE HOWARD.

AUTUMN COLORS

Returning tourists from the New England States are in ecstasies over the wonderful Fall coloring of foliage in that locality. Further South, in the vicinity of Philadelphia, as yet, it is not so rich as in former years, possibly due to the constant, cool, wet weather. A bright dry Fall seems to be more favorable to rich Fall coloring rather than cold and wet, possibly this accounts for the superior Fall coloring of American trees and plants to those growing in Europe.

October 9th, 1919.

BILL H. R. 5939

Charles H. Perkins, 2nd, chairman, Legislative Committee, American Association of Nurserymen, calls attention to Bill H. R. 5939 introduced into the House of Representatives by Congressman Norman J. Gould. This bill if passed will carry an appropriation of \$30,000.00, and which will be used for the purpose of doing research and experimenting work, also to establish and maintain mother orchards or plantations for the purpose of providing domestic sources of seeds, cuttings and other propagating material to assure the future of American fruit, nut and ornamental interest. This bill is one which every nurseryman should be vitally interested in, and for this reason Mr. Gould should be given the support of every nurseryman, so far as he is able to give it.

Nurserymen should write their Congressmen, urging them to support this bill when it comes up for passage.

Our last issue was nothing to be proud of, in fact we feel like apologizing to our subscribers for sending out such an abbreviated copy.

There are few businesses that have not been affected by the uncertainty of transportation and the unusual conditions prevailing.

We have now our stock of paper on hand and promise to try and do better in the future.

Frederick W. Kelsey, 150 Broadway, N. Y., is very optimistic about Quarantine 37 being of the opinion that very decided modification will be effected before long if the matter is rightly handled.

According to the Special Commercial Pear and Apple Crop report, the present season crop of pears is 8,601,000 bushels against 7,589,000 for 1918.

Apples are, 23,177,000 barrels for 1919 against 24,724,000 barrels for 1918.

PHILADELPHUS

PHILADELPHUS. The most distinct and the handsomest of the Asiatic species of *Philadelphus* in the Arnold Arboretum is *Philadelphus purpurascens*, discovered by Wilson in western China. It is a large shrub with long arching stems from which rise numerous branchlets from four to six inches long and spreading at right angles; on these branchlets the flowers are borne on drooping stalks; they are an inch and a half long, with a bright purple calyx and pure white petals which do not spread as they do on most of the species but form a bell-shaped corolla and are exceedingly fragrant. This is one of the handsomest of the shrubs brought from western China to the Arboretum. *Philadelphus pekinensis* from northern China and Mongolia is a stout bush rather broader than high which every year produces great quantities of small flowers tinged with yellow. Another interesting garden plant, *P. Falconerii*, which is certainly Asiatic and probably Japanese, has narrow lanceolate leaves and fragrant flowers in from one- to six-flowered racemes, and is distinct in the shape of its leaves and in its long narrow petals. The origin and history of this plant is not known. Some of the species hybridize freely and several of the handsomest of these plants are hybrids. One of the first of these hybrids to attract attention was raised in France before 1870 by Monsieur A. Billard; it is known as *Philadelphus insignis* and sometimes is called Souvenir de Billard. It is one of the handsomest of the large-growing Syringas, and the last or nearly the last to bloom in the Arboretum, for the flowers will not be open for another month. A hybrid probably between *P. grandiflorus* of the Appalachian Mountain region with a species from our northwest coast appeared in the Arboretum a few years ago and has been named *P. splendens*; it is a large and vigorous shrub with unusually large flowers, and one of the handsomest Syringas in the collection. *Philadelphus maximus*, a supposed hybrid between *P. latifolius* from the southeastern United States, and *P. tomentosus* from the Himalayas, grows to a larger size than any of the other Syringas. It is not rare in old Massachusetts gardens in which plants from twenty to thirty feet high can occasionally be seen.

THE
American Association of Nurserymen

ORGANIZED 1875

Has in active and constant operation:

A Credit and Collection Bureau:

Handling Claims and Collections for Members Only. Where the advice or services of a local Attorney are required, we have a corresponding list of 12,000 Attorneys, bonded by the U. S. Fidelity & Guaranty Company. Our Bureau offers Members unusual facilities for obtaining prompt and accurate Credit Information.

The Nurserymen's National Service Bureau:

Distributing articles of a timely and helpful sort to over 800 Newspapers, believing that the more general, intelligent and profitable use of Trees and Plants will benefit the public and ourselves. This work, to increase the business and the profits of our Members, is directed by a Committee of representatives, conservative Nurserymen and financed by the Association.

A Traffic and Freight Claim Bureau:

Ably conducted by Mr. Sizemore, an authority on all matters relating to rates, classification and transportation. Freight and express bills are audited for Members Only and overcharges collected for them.

An Arbitration Committee:

For the adjustment of claims and disputed accounts between Members. Every case submitted has been decided promptly and the award accepted gracefully, thus conserving the good-feeling and friendly relationship necessary between members of the trade.

A Vigilance Committee:

Who are charged with investigating all Complaints and Grievances whether of Nurserymen or of Planters, and the prompt and equitable adjustment of them, in justice to those concerned; thus assuring all who do business with members of our Association, of fair dealing and correct treatment as far as the prestige and influence of the National Trade Organization can secure it.

Other Committees made up of leading men in the trade have under constant consideration such important matters as **Legislation, the Tariff, Standardization, Policies, Nomenclature, etc.**

Our **Four Hundred Members**, scattered throughout the United States and Canada, are the leading, progressive, successful men in the industry; our efforts are cooperative and to make more business and better business for our Members; the things we are doing and the program we outline, indicate what we stand for.

All reputable nurserymen who approve of Progress and Cooperation are invited to stand with us. For further information, address:

American Association of Nurserymen

JOHN WATSON, *Executive Secretary.*

PRINCETON, New Jersey

The crossing about thirty years ago in France by Lemoine of *P. coronarius* with *P. microphyllus* has produced an entirely new race of Syringas which has proved to be one of the best additions to garden shrubs that has ever been made. The first plant obtained by this cross is called *Phitadelphus Lemoinei*; it is a perfectly hardy shrub four or five feet high and broad, with slender stems which bend from the weight of countless flowers; these are intermediate in size between those of the two parents and retain the fragrance of *P. microphyllus*. There are at least a dozen distinct forms of this hybrid made by Lemoine, varying considerably in the size of the plants and of the flowers, and in the time of flowering. One of the handsomest, perhaps, is called Candelabre; this is a very dwarf plant with flowers larger than those of either of its parents and an inch and a half wide, with petals notched on the margins, and without the perfume of its parents. Other distinct forms equally hardy and beautiful are Avalanche, Boule d'Argent, Bouquet Blanc, Erectus, Fantasie, Gerbe de Neige and Mont Blanc.

HOME GARDEN FRUITS

By M. G. Kains, Columbia University, New York,
Delivered before the Massachusetts Horticultural Society.

While the past five, and especially the last three, decades have seen more remarkable improvements in horticultural practices than did the previous five, for instance, the development of modern tillage, fertilizing, cover cropping, spraying, and rational pruning, which have made the fruit growing industries of to-day highly specialized arts, perhaps the most significant development of all is the increased and steadily increasing public demand for fruit varieties of high quality.

For this growth, particularly so far as apples are concerned, Oregon, Washington, Colorado and other Western orchardists doubtless deserve considerable credit; first, because they boldly nailed their colors to high standards of excellence, both as to variety and to character of specimen, and second, because they deliberately set about the education of the public with respect to such standards. In these two directions they have not only themselves benefited, but they have performed a service alike to the consuming public and to fruit growers in general. Fruit growers in other sections have been steadily falling into line and the markets of our larger cities are annually being more liberally supplied with high quality fruits.

Where did these Western and other growers of choice fruits get their standards? Did they adopt the *caveat emptor* (let the buyer beware) policy which so often tends to arouse the righteous ire of the long-suffering and hoodwinked public? Not at all. Did they go to the growers of Ben Davis apple, Kieffer pear, Elberta peach, Lombard plum, Lady Thompson strawberry, and other low quality varieties for their standards of flavor? No indeed! Doubtless they are no more entitled to halos than are our Eastern growers for the honesty of their pack, because the cost of transportation prohibits their adoption of dishonest packing methods; they have been forced to pack honestly or go to the wall. But where did they get their standards of flavor? Certainly not in the big commercial orchards of the middle West and the East, or-

chards of Gano, York Imperial, Baldwin, Rhode Island and other at best culinary varieties. No; they ignored these plantations and went to sources which for them held vivid and desirable ideals, the fruit plantations of their boyhood.

Those plantations were neither set out by specialists nor primarily for profit. Their main reasons for existence were that the family enjoyed good fruit and wanted a continuous succession and an abundant supply throughout the year. Though doubtless many of these plantations were larger than necessary to supply even the largest families of those days, the surplus was just so much to give away to less fortunate relatives and to neighbors or to sell in the local market.

One of the most pleasing customs of those good old days, one that deserves to be revived today, owed its charm to the choice fruit grown in the family plantation. When visitors dropped in for the afternoon or the evening the *au fait* thing was to have the company enjoy some home grown fruit before departing. This was not served in the modern sense, now too frequently employed, to indicate that the social session is at an end, but in the whole-souled spirit of hospitality in the extending of which both host and hostess could take a keener pleasure in serving a home grown product and feeling that the favorable comments upon it were more genuine than is possible when purchased provender is provided. What would have happened if Ben Davis apple, Kieffer pear, Elberta peach, or Lombard plum had been used instead of the choice varieties? Might not the guests have felt that as direct a hint was being given them as when in baronial times the cold shoulder of mutton was trotted out to apprise the guests that they had outlasted their welcome? But who would have planted or grown such inferior fruits with bore-bouncing intent? Would it not have wasted valuable land and time and also indicated a lack of resourcefulness on the part of host and hostess?

Upon no members of the family or of the district in those days was the influence of choice fruit so profound as upon the boys. Setting aside mothers' testimonies as biased we may perhaps accept the popular view that boys are voracious animals, but it is slanderous to accuse them of having indiscriminating tastes, accepting all as grist that comes to their mills. If the confession of one of them, now grown up, he insisted upon he would be forced to admit that he could always find the choicest specimens of the choicest varieties not merely in his father's and his near, and more or less dear relatives' plantations, where he normally would be expected to be welcome by day, but in a very considerable range of territory and at hours when his elders had relegated their vigilance to less somnolent watchers, dogs, to be explicit, with which, however, he made it a point for obvious business reasons to be on terms of intimate friendliness.

The Ontario village in which my boyhood was spent is typical of hundreds of that day from New England to Michigan and as far south as Maryland, if not of a much wider area. Practically every home had its garden and fruit plantation, which often consisted of an acre or more. Here I had unlimited range in five fruit plantations, my father's, my grandfather's and those of three uncles, and a more restricted range in many neighbors' gardens. Each of these had been planted to meet the personal taste of the

family and to furnish a liberal supply of fruit throughout the whole year. Often the last of the apples would be taken from storage when the first strawberries were gathered.

Again, since the smallest of these plantations was more than an acre set in the interplanted plan popular in those days, the aggregate was a large list of varieties. Like many another boy of my day, while still in my teens, I knew fifty or more varieties of apples, twenty-five or thirty of pears, ten or fifteen of peaches, grapes, and plums, six or eight of cherries and a goodly list of bush fruits and strawberries. This knowledge was fostered, supplemented and extended by studying varieties at the county fair where many of the boys, as well as their fathers, made exhibits.

While a reasonable proportion of the boys in those days went direct from school into some branch of farming and planted orchards more or less like the ones I have described, and while a few took up commercial fruit growing, the majority went into other lines of business; but among these last are many, the influence of whose boyhood led them later in life to take up fruit growing either for business or for pleasure. So far as I have been able to discover, they have with remarkably few exceptions chosen the varieties with which they were familiar during boyhood, or other varieties of equally high quality.

In those boyhood plantations fruits of low quality were

Boston Ivy Clematis Paniculata
Shrubs Raspberries
Blackberries Evergreens
Ornamental Trees Perennials
California Privet Hedge
Japan Berberry

Prices on request

PETER BOHLENDER & SONS
 Tippecanoe City, Ohio

AMERICAN FLORIST'S TRADE DIRECTORY
Price \$3.00, Postpaid
 For Sale By
NATIONAL NURSERYMAN PUB. CO. Inc.,
 HATBORO, - - - PA.

WANTED

WANTED

Young nurseryman as partner to build up nursery business. Opportunity limited only by ability to push business. No capital required. Best references required.

HAROLD ZEISS

1004 Harris Trust Bldg.

Chicago, Ill.

WANTED

A first-class salesman who is capable of taking care of general nursery correspondence. State experience, age and salary desired.

FANCHER CREEK NURSERIES,
 Fresno, Calif.

FOR SALE

FOR SALE

Eighty Acres well improved rolling land, six room house, grafting shop, good barn, new silo, good well and windmill, five new individual hog houses, chicken house. Buildings all well painted a year ago this fall. About 200 rods of new woven wire fence on the place. This would be a very suitable place for stock raising in connection with a nursery as there is pasture land and improvements for both.

This nursery has been known as The Hawkeye Nursery which has been running until the last few years and was fixed up purposely for a nursery having many advantages in the way of landscape work and variety of trees in the yard and orchard that is matured. Location is very good for a nursery as there is no nursery near, it is 12 miles southwest of Webster City, 6 miles north of Stratford, 4 miles southeast of Homer and 7½ miles northwest of Stanhope. Asking \$215.00 per acre.

For further information write

R. A. KAUFFMAN

OAKDALE

IOWA

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock. Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed. Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

conspicuous by their absence. Our fathers thought that what was not good enough for them was not good enough for other people. They turned deaf ears to the arguments that such varieties are robust, prolific, have fine color, and that the lowering of quality will not be noticed by the public in general. They knew better perhaps than the present generation of commercial fruit growers that nothing so tends to develop an extensive demand as a really fine article. For, to quote a favorite proverb, "The remembrance of quality lives long after the price has been forgotten." The man who eats a poor or indifferent fruit will not be tempted soon to eat or buy again; whereas the man who eats a good one wants another specimen right away. Not until money making became the ruling passion in orcharding were low quality fruits planted more extensively than for testing.

Though Ben Davis apple and Elberta peach must bear much responsibility for curbing public appetites for apples and peaches respectively, it seems safe to declare that no one fruit variety has played such havoc with public taste as has the Kieffer pear. The train loads of this whitened sepulchre of a fruit that for the past twenty years or more have flooded the large city markets have led the public to believe that pears in general are inferior fruits, fit only for canning, if that. Even the Bartlett has had its skirts soiled by the commercialism that prompts California growers to gather it too green and ship it to Eastern markets where its consequently flat flavor belies its fine color and thus begins what the Kieffer finishes, the suppression of the public appetite. Thus the rising generation has had little chance to learn the truth that the pear is one of our richest, most luscious and delectable of fruits.

To be sure the reaction against such bar sinister influences has set in; men who have learned that the public is willing to eat really fine pears have begun to risk the difficulties of pear culture and to plant the choicer varieties, especially those that reach the market after the California Bartlett season has passed. The rising generation may therefore fare better than the present one.

While this commercial growing of fine varieties speaks well for the prospective improvement of public taste, it is just as much to be desired that the family plantation should become as prominent as in days of yore. In such plantations should be at least some of the choice varieties too difficult to grow or too sparsely productive to be considered for commercial ventures. For they certainly minister to the esthetic admiration of color, form, fragrance, and flavor, to say nothing of the pleasure of achievement in their production. But they exercise a still more subtle and important influence: they maintain and pass on to the rising generation high standards of excellence toward which commercial fruit ventures should always strive.

It seems necessary to criticize adversely much of the present day literature and many of the specialists of the

agricultural colleges and experiment stations. The great majority of the writings on fruit growing within the past twenty-five or thirty years have too strongly emphasized commercial phases and given too little heed to the stigmatized "amateur" features of fruit growing as if these were of an inferior instead of a potentially superior order. Amateurs are frequently connoisseurs. The writers seem to have dollars so close to their eyes that they see nothing else. As a matter of fact, the great authorities on fruit growing—Coxe, Prince, Barry, Thomas, Warder, Brinckle, Lyon, the two Downings, and the galaxy of New Englanders, Kendrick, Wilder, Hovey, and the Mannings, to name only a few—were all amateurs, yet what does not the American public and especially the fruit grower owe them?

They made fruit growing popular, not only in their day but for ours. They undertook and with their own private capital completed monumental works. Nowadays the Government and the individual states pay their successors and supply the funds to solve modern fruit problems. Therefore, it behooves these successors to make broad instead of narrow specialists of themselves so they may sympathize with and encourage amateur as well as commercial fruit growing in their respective regions; for among the amateurs probably far more than among the commercial fruit growers are our authorities of the rising and future generations to be found. To determine the truth of this statement I suggest that my auditors examine the list of present day investigators, teachers, and writers on fruit growing to see how few are the sons of commercial, and how many of amateur fruit growers. The result I venture to say will be surprising.

Let me hasten to say my audience is mistaken if it has concluded from any of my remarks that I advocate a return to the hit-or-miss method of former days. I most certainly do not. I am a firm advocate of every method that makes for better fruit and more of it. What I have striven to emphasize is the importance of replacing the now largely decrepit fruit plantations with new ones of the choicest varieties to be handled according to the best modern methods. By the establishment of such plantations the standards of excellence will continue to rise or at least be maintained. Thereby we may confidently look for improvement in the general standard of excellence; for as the floor of a valley is raised by the descent of soil from the mountains, so must the refinement of taste be improved by the increased popularity of high quality fruits. Fruit growing should, and thereby can, be made to minister, perhaps as favorably as music, art, and literature, to the sensibilities of the family, the community, and the nation. Such environments as superior family fruit plantations afford seem to be the most favorable for the training of future fruit lovers and specialists among the rising generation.

(To be continued)

Knoxville, Tenn. Oct. 7th, 1919.

Enclosed find check for 1.50, 1 yrs. subscription.—Would be like a ship without a rudder if we did not have it.

Very truly yours,
Marble City Nursery Co.

Peach Pits *For Sale*

We have a fine lot of peach seed consisting of Muir, Lovell and other budded varieties to offer. The seed is in fine shape for prompt shipment.

FANCHER CREEK NURSERIES
Fresno - California

STRAWBERRY PLANTS

We offer for Winter and Spring delivery 1919-1920 upwards of FOUR MILLION strawberry plants of the following varieties.

Parsons Beauty Klondike Gandy

The most extensively planted varieties for commercial purposes.

We are located in the largest STRAWBERRY CENTER in the WORLD and have the soil and climate to produce the best strawberry plants. Only limited stock of other varieties unsold.

Would be pleased to quote you.

Bunting's Nurseries, G. E. BUNTING & SONS, Props.
Selbyville—Delaware
Subscribers to "Nurserymen's Fund for Market Development."

500,000 California Privet
—Hardwood Cuttings—
1,000,000 Cal. Privet
250,000 Privet Amurense
1,000,000 Shade Trees
1,000,000 Hardy Shrubs
100,000 Roses

Write for price list.
OAK LAWN NURSERY,
Huntsville, Ala.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobolan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

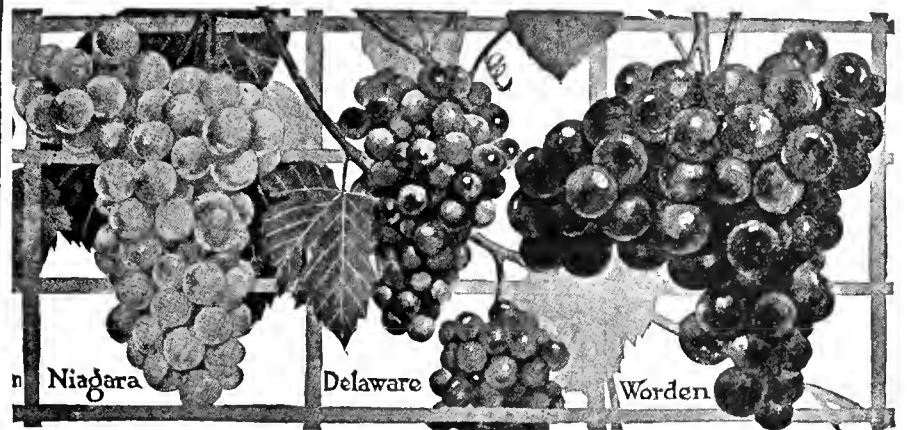
DRESHER, - Penna., U. S. A.

HARDY PERENNIAL PLANTS

Phlox, Iris, Delphiniums, Shasta Daisies and many other perennials. Send us your want list for prices or ask us for wholesale price-list.

WILLIAM TOOLE & SON,
Hardy Plant & Fanny Farm,

Baraboo - Wisconsin



T. S. HUBBARD CO.
Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting
Established 1866 Send for Catalogue

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

∴ STRAWBERRY PLANTS ∴

Summer and Fall bearing varieties, shipped to you or direct to your customer under your tag.

Plants and service that pleases both you and your trade.

Let us quote you

V. R. ALLEN,

59 Lane Avenue

Seaford, Del.

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co
Hatboro, Pa.

Specialists in Nursery Printing

Ask for Prices.

We are the printers of this Magazine

ABELIA GRANDIFLORA

Nice lot of field grown, well branched stock. Three sizes, 8 to 12 in., 12 to 18 in., 18 to 24 in. By the 100, 1,000 or 10,000.

THOMASVILLE NURSERIES
THOMASVILLE - Ga.

We offer for fall shipment, Catalpa, Willow, Lombardy and Carolina Poplar, Oriental Plane, Silver Leaf Maple 8 to 14 ft. Spirea, Deutzia, Weigelia, Althea, Privets, Forsythia, Lilac, Crape Myrtle, Corral Berry, Spice Bush, Magnolia 2 to 5 ft.

CURETON NURSERIES, Austell, Ga.

LABELS FOR NURSERYMEN

THE BENJAMIN CHASE CO.

DERRY, N. H.

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials.

Send us your want list.

Inspect our stock.

The Gardeners' Chronicle

(Established 1841)

The BEST and OLDEST horticultural paper in England. Price 4d per week.

Send for free copy and subscription rates to:—

The Publishers, 41 Wellington St.

W. C. 2, London, England



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address
The Florists' Exchange, P. O. Box 100, Times Square Sta.

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the

"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSERYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.

147 Summer St.

Boston, Mass.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries	Currants	Rhubarb
Raspberries	Gooseberries	Asparagus
Blackberries	Grape Vines	Horseradish
Dewberries	Privet	Hardwood Cuttings
Berberry	Spirea	Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS
NEW CARLISLE OHIO

A Fine Stock of

Norway Maple, Silver Maple, European Sycamore

and other Ornamental Trees in All Sizes

A beautiful lot of CUT LEAF BIRCH 8-10 ft. and 10-12 ft.

Hardy Shrubs of all kinds

Also a limited supply of Fruit Trees and Small Fruit Plants.

T. B. WEST

Maple Bend Nursery

Perry, Ohio

W. T. HOOD & CO.

OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1920

Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; California Privet, 2, 3, and 4 years; Sugar Maple Seedling, six inches to ten feet.

Write for Prices

TO THE TRADE ONLY

We offer a general assortment of Nursery stock, and Nursery supplies, including—

A few thousand Vrooman

FRANQUETTE AND MAYETTE WALNUTS,

both grafted, and seedlings from grafted trees, and

ITALIAN OR SPANISH CHESTNUT

Portland Wholesale Nursery Co.

122½ GRAND AVENUE

PORTLAND, OREGON

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries
North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.

Framingham Nurseries
FRAMINGHAM
MASS.

PEACH SEED

NORTH CAROLINA NATURALS

Boxed F. O. B. Lexington

Prices on Application

H. F. Hillenmeyer & Sons
Lexington - - - - - Ky.

We Solicit Correspondence and a List of Your Wants

For Fall 1919 and Spring 1920

CALIFORNIA PRIVET, 2 yr. extra good.
All grades—Special prices on carload lots. Samples if desired.
Oriental Planes and Norway Maples, Pin and Willow Oaks,
Lombardy Poplars.
A select lot of trees in all sizes—transplanted.
APPLES: 2 yr. Buds:—mostly $\frac{3}{8}$ and $\frac{1}{2}$ in. grades
1 yr. Buds:—All the standard varieties in 2-3 ft.
and 3-4 ft. grades
PEACH: A few thousand—nice 1 year: mostly $\frac{1}{16}$ and up, 4-6 ft.
1 yr. ASPARAGUS.
MISCELLANEOUS.
A good stock of Flowering Shrubs, Shade Trees, etc. etc.
SEND US YOUR TRADE AND WANT LIST

Baltimore, Md. **Franklin Davis Nurs., Inc.**
404 W. Baltimore St. Joseph Davis, General Manager.

NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

ATTENTION!

We are now offering our usual brands of

RAFFIA

Best Quality—

—Lowest Prices

Price List mailed on request.

Thomas B. Meehan Co.

DIRECT IMPORTERS

Dresher - - - Penna.

Subscribers to "Nurserymen's Fund for Market Development."

Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

Write for our List

Cannas, Dahlias and Gladioli

C. BETSCHER, Dover, O., U. S. A.

NORWAY MAPLES

(The finest and most satisfactory of all shade trees)



We have the largest blocks in America,—all sizes for all purposes. Our maples have straight, smooth trunks, fine tops and clean, strong roots,—they will make good. Tell us how many you can use and the sizes and we will quote interesting prices. Better yet, come to the Nursery and inspect and mark the trees for yourself. You will be pleased with what we have to offer.

NORWAY MAPLES (*Acer platanoides*), have typical Maple leaf, large and bright green, fading to gold in the fall. Trunk and branches are sturdy and strong, lending an effect of ruggedness. Growth is fast. Branches and foliage are thick and compact, and the head, which is round-topped, begins to branch not far above the ground. The tree is large, towering 50 feet high when fully grown. For lining the sides of lanes and roads, for a lawn, to protect the house from sun and weather, for shade, and for real permanent worth in all landscape planting, there are no other trees in its class. The handsomest American lawn tree. We offer,—

5,000	8 to 10 ft., 1 to 1½ in.	9,000	2½ to 3 in.
6,000	10 to 12 ft., 1½ to 1¾ in.	8,000	3 to 3½ in.
7,000	12 to 14 ft., 1¾ to 2 in.	3,000	3½ to 4 in.
8,000	14 to 16 ft., 2 to 2½ in.	1,000	4 in.

ASK FOR SPECIAL PRICES ON CAR LOTS. DO IT NOW.

HARRISONS' NURSERIES,
J. G. Harrison & Sons
BERLIN, - MARYLAND

Subscribers to "Nurserymen's Fund for Market Development."

PRESS OF ROBINSON PUBLISHING COMPANY, HATBORO, PA.



THE NATIONAL NURSERYMAN



DECEMBER 1919

Published Monthly at Hatboro, Penna., U. S. A., in behalf of the Trade Interests of Nurserymen, Seedsmen and Plant Growers in General

THE MONROE NURSERY

Established 1847.

Offers a Fine Stock of
Cuthbert Raspberries
Spiraea Van Houtte
Other Ornamentals
Shrubs

Will be pleased to quote on your list of wants

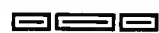
I. E. Ilgenfritz' Sons Co.
Monroe, Mich.

Subscribers to "Nurserymen's Fund for Market Development."

MOUNT ARBOR NURSERIES

E. S. WELCH, Pres.

Shenandoah, Iowa



A large supply of:-

Elm, American White - Ash, Fraxinus Viridis
Maple, Silver Leaved, Norway, Sugar
Poplar, Carolina, Lombardy, Norway, Silver Leaved, Golden
Catalpa, Speciosa, Bungei - Balm of Gilead

Shrubs

Cornus, Siberica, Stolonifera, Floridus Rubra
Lilac, Purple and White
Spirea, Aurea, Billardi, Rosea, Douglassi, Opulifolia,
Van Houtte
Philadelphus, Coronarius, Gordon's, Grandiflorus, Lemoine
Viburnum, Opulus, Sterilis, Lantana
Ampelopsis Engelmanni

Always pleased to quote on your wants.

Subscribers to "Nurserymen's Fund for Market Development."

Strawberry Plants Everbearing and Standard

From November 1 to May 1

We can supply you healthy true-to-name, well-rooted plants. Fresh dug every day. Can ship to you or direct to your customers. Let us handle your Strawberry plant business next year. Our plants please our customers. They will please yours.

The W. F. Allen Company
Strawberry Specialists,
Salisbury, - Maryland

Subscribers to "Nurserymen's Fund for Market Development."

Be a regular Customer, for we have a complete line of stock grown and cultivated to the highest standard, for a particular retail trade.



C. R. BURR & CO.
Manchester, Conn.

Subscribers to "Nurserymen's Fund for Market Development."

The
Preferred
Stock

The
Preferred
Stock



JOLTS!!!

Have you had them this fall too?

We surely have had ours.

Short deliveries and poor excuses to justify them. However, they have not altered our settled policy of delivering to our customers what we book, and we rather pride ourselves that we have filled our orders practically complete. In many instances it has cost us money to do so.

We're working on our inventory now, and shall have our first spring bulletin in the mail this month. In the meantime, write us about anything you are needing, and if it is one of these specialties, we are pretty sure to be able to take care of you. If you want something we cannot furnish, probably we know where you can get it.

CLIMBING ROSES **AMPELOPSIS VEITCHII**
CLEMATIS PANICULATA **PEONIES**
CLIMBING VINES **HERBACEOUS PERENNIALS**
FLOWERING SHRUBS **ORNAMENTAL TREES**

Please use printed Stationery.

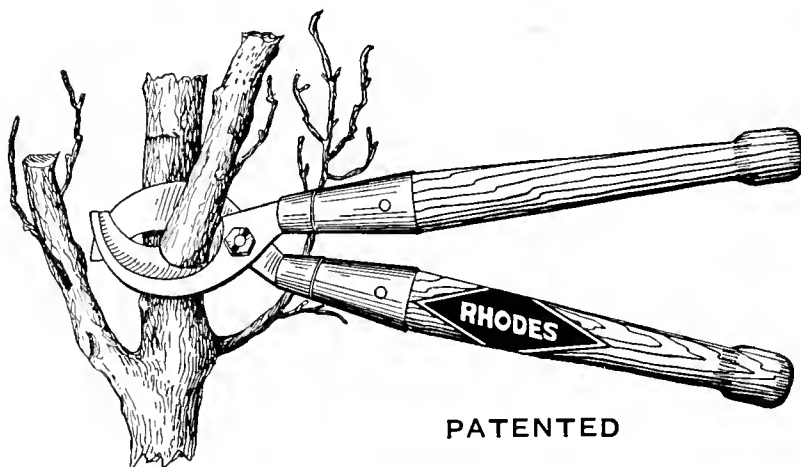
Jackson & Perkins Company
Newark, - New York

The
Preferred
Stock

The
Preferred
Stock

RHODES DOUBLE .. CUT .. PRUNING SHEARS

In Use Throughout the World



The finest cutting and best made pruner on the market and the only one that cuts from both sides of the limb and does not bruise the bark. Made in all styles and sizes.

They are advertised in all the leading journals throughout the country and will prove a profitable line for you to handle. All goods delivered.

Send for circular and trade discounts.

Rhodes Mfg. Co., 524 S. Division Avenue,
Grand Rapids, Mich.

Hardy Lily Bulbs

**Lilium Auratum, Magnificum,
Album, Rubrum, Melpomene,
Roseum, Giganteum.**

Case lots only

Dutch Bulbs

Tulips and Narcissus

Rose Seeds

Seeds of Rosa Multiflora Japonica

This new Japanese stock is considered better than Manetti or Multiflora for budding Roses.

Raffia

Red Star Brand **XX Superior Brand**
AA West Coast, also in 20 colors
Shipped promptly from stock.

All of above can be shipped at once.

Write for prices specifically stating requirements.

McHUTCHISON & CO., 95 Chambers St., New York

We grow young evergreens in large quantities and every tree we sell is raised from seeds in our own nurseries.

If you are in need of lining out stock why not write for our wholesale trade list before placing your order. Our prices are low because we specialize in young stock.

COLLECTORS OF TREE SEEDS

**THE
North-Eastern Forestry Co.**

**CHESHIRE
...Connecticut...**

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

PAINESVILLE NURSERIES



THE STORRS & HARRISON CO.

NURSEYMEN --- FLORISTS --- SEEDSMEN

ESTABLISHED
1854

PAINESVILLE, OHIO.

1200 ACRES
45 GREENHOUSES

Subscribers to "Nurserymen's Fund for Market Development."

When writing to Advertisers please mention the National Nurseryman.

EVERGREENS

Seedlings—Transplants

MILLIONS OF THEM

Arbor Vitae—American	Concolor
Arbor Vitae—Compacta	Englemans Spruce
Arbor Vitae—Douglas Golden	Jack Pine
Arbor Vitae—Globosa	Norway Spruce
Arbor Vitae—Hoveys Golden	Norway Pine
Arbor Vitae—Pyramidalis	Pinus Mugho
Arbor Vitae—Siberian	Pinus Flexilis
Arbor Vitae—Tom Thumb	Pinus Ponderosa
Arbor Vitae—Orientalis	Pitch Pine
Arbor Vitae—Orientalis Aurea	Red Cedar
Arbor Vitae—Orientalis Pyr	Retinispora, 3 varieties
Austrian Pine	Swedish Juniper
Biota, 3 varieties	Scotch Pine
Black Hills Spruce	White Pine
Colorado Blue Spruce	White Spruce
Douglas Spruce	

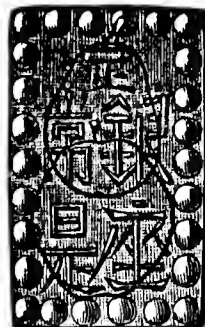
Especially attractive prices on large orders
Also a Complete line of Fruit and Ornamental
Stock

Sherman Nursery Co.

Charles City, Iowa

Subscribers to "Nurserymen's Fund for Market Development."

Heikes—Huntsville—Trees



Established 1872

1500 Acres

SHRUBS SHADE TREES EVERGREENS

Good assortment. Excellent quality.

All our own growing.

Fall trade list now ready. Ask for your copy.

HUNTSVILLE WHOLESALE NURSERIES

HUNTSVILLE, ALA.

SPECIAL NOTICE

APPLE QUINCE PEAR CHERRY
PEACH PLUM

A Fine Block of Own Root Roses

ORNAMENTAL TREES SHRUBS

BERRIES CLEMATIS

EVERGREENS PEONIES PHLOX

and

HERBACEOUS PERENNIALS

Write for our Special Prices

SPECIAL ATTENTION given to Dealers, complete lists
and carload lots.

W. & T. SMITH COMPANY

GENEVA, N. Y.

73 Years

1000 Acres

Subscribers to "Nurserymen's Fund for Market Development."

SURPLUS STOCK

- 100 Ailanthus, 1½-2 inches
- 1000 White Ash, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 1½ to 2 inches, 2 to 2½ inches
- 140 Box Elder, 10 to 12 ft., 1½ to 2 inches
- 12000 Elm, 10 to 12 ft., 1½ to 2 inches, 2 to 2½ inches, 2½ to 3 inch
- 120 Linden, 10 to 12 ft.
- 12000 Norway Maple, 1½ to 2 inch, 2 to 2½ inch, 2½ to 3 inch, 3 to 3½ inch, 3½ to 4 inch.
- 300 Schwedleri Maple, 2½ to 3 inch, 3 to 3½ inch, 3½ to 4 inch.
- 5000 Soft Maple, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 1½ to 2 inch.
- 800 Lombardy Poplar, 6 to 8 ft., 8 to 10 ft., 10 to 12 ft., 2 to 2½ inch, 2½ to 3 inch.
- 200 Tulip Tree, 1½ to 2 inch, 2 to 2½ inch.
- 150 Weeping Willow, all sizes up to 3 inch.
- 150 Erect Willow, all sizes up to 2 inch.
- 1500 Viburnum Opulus, 3 to 4 ft., 4 to 5 ft.
- 2500 Viburnum Sterilis, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
- 500 Deutzia Crenata, 2 to 3 ft.
- 400 Deutzia Candidissima, 2 to 3 ft.
- 3000 Deutzia Pride of Rochester, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
- 5000 Lilac Purple, 2 to 3 ft., 3 to 4 ft.
- 1000 Lilac White, 2 to 3 ft.
- 1200 Philadelphus Grandiflora, 3 to 4 ft., 4 to 5 ft., 5 to 6 ft.
- 500 Philadelphus Falconeri, 3 to 4 ft., 4 to 5 ft.
- 900 Golden Elder, 2 to 3 ft., 3 to 4 ft., 4 to 5 ft.
- 1600 Spirea Billardi, 2 to 3 ft., 3 to 4 ft.
- 1200 Spirea Collosa Alba, 10 to 12 inch.
- 400 Spirea Reevesi, 2 to 3 ft.
- 2000 Spirea Thunbergii, 2 to 3 ft.
- 4000 Snowberry, 2 to 3 ft., 3 to 4 ft.
- 3500 Indian Currant, 2 to 3 ft., 3 to 4 ft.
- 1500 Spirea Salicifolia, 2 to 3, 3 to 4.

C. M. Hobbs & Sons, Bridgeport, Indiana

The National Nurseryman.

FOR GROWERS AND DEALERS IN NURSEYSTOCK
The National Nurseryman Publishing Co., Incorporated

Vol. XXVII.

HATBORO, PENNA. DECEMBER 1919

No. 12

Allees in French Landscape Gardening



Vistas or Allees cut through the woods

The French landscape gardeners are very fond of this feature, the illustration shows these *allees* at Castle Brunehaur, suburbs of Etampes. A glance at the picture will readily reveal the charm of the vistas cut through the woods surrounding the castle. Vistas cut through woods are very often an attractive feature of large estates, in this country, but it is rarely that the vista is considered for its own beauty but rather to open up a distant view. There is something, however, very interesting and fascinating as a light effect through the trees. It gives the impression of distant grandeur. It is a feature that landscape gardeners in this country could emulate to good advantages when it can be done without sacrificing too many trees. The *allees* would make pleasant shady walks through the woods, permit the circulation of air and make it possible to grow so many more attractive flowers and woodland plants along the margins, than are likely to thrive in dense growth.

One of the most unsatisfactory features of woods surrounding a home is the undergrowth and debris, that accumulates. It is not only dangerous on account of fire but there is little charm in woods near the residence or

near well kept grounds that are left to grow in a jungle and exist in almost their native state. There is something incongruous in natural or neglected woods that immediately join well kept grounds. Yet to bring the two in harmony, only requires the skill of the expert gardeners. A glance at the picture will reveal the geometrical flower beds in contact with the woods yet by cutting in vistas through—while not detracting from the beauty of the natural growth, gives that touch of care which only adds to its charm.

A. M. Augustine, chairman of the committee to arrange for the 1920 convention reports that reservations have been secured at Congress Hotel. This hotel is outside Loop on the Lake Front. It is thought that it will be more quiet than the Sherman House and we are assured that no other convention will be entertained at the same time the nurserymen are. Hence the congestion due to the seedmen and nurserymen meeting at the Sherman House during the same week in June last, should be avoided this year.

NOTES FROM THE EXECUTIVE SECRETARY'S OFFICE

American Association of Nurserymen

November 24, 1919.

LEGISLATION: The attention of all members is called to the following bills in Congress.

Senate 2904 by Senator Jones, of Washington, provides as follows:

"That the manufacturer of any article produced after the passage of this Act and intended to be put into inter-state commerce shall plainly mark upon or attach to such article the cost thereof.

"Sec. 2. That every retailer of any manufactured article carried in inter-state commerce after the passage of this Act shall put upon or attach to such article before sold to his customers in plain figures the cost of such article to him."

Violation of this Act will mean a fine of not more than \$1000 or imprisonment for not more than one year.

H. R. 8315, introduced by Congressman Siegel, provides:

"That every person in the United States before transacting business either as manufacturer, wholesaler or retailer, shall be required to obtain from the Collector of Customs of the district wherein he transacts business, a license or permit to transact business within such internal-revenue district for a period of one year.

"That any person now or hereafter engaged in business in the United States to whom a permit or license shall have been issued, who shall expose or offer for sale or cause to be exposed or offered for sale to the public any article of goods, wares, or merchandise without having a card showing the true, actual cost thereof, such person shall be guilty of profiteering and shall be punished as hereinafter provided."

The penalty is a fine of not to exceed \$5000 or imprisonment for not more than two years, or both.

It is understood that both bills have strong support. If members are not in favor of them, they are advised to write immediately to their Senators and Representatives in Congress to that effect and to notify the Executive Secretary of the Association.

GOULD BILL: There will be a hearing on this at the next session of Congress, in December. Many members have failed to reply to my circular asking for instructions. You, who read this: If you have not already written me about the Gould Bill, won't you do it today? If you have already done so, thank you. Your officers can't represent you intelligently nor efficiently if you don't tell them what you want when they ask you for instructions.

SPEAKERS COMMITTEE: Last month, I suggested the great opportunity to present the Association and its work in a favorable way by our members speaking at meetings of Horticultural Societies, Garden Clubs, Farmers' Institutes, etc. President Moon has appointed a Speakers Committee to see that every meeting is attended by a member. The others are just as much within the opportunity to put our story across. Don't neglect any chance

to get yourself invited to talk at every meeting of persons interested in trees and plants.

LECTURES: We have, as you know, two sets of colored lantern slides which are suitable for illustrating lectures before garden clubs and farmers' institutes. Our efforts to interest home-owners in using our products intelligently and profitably, are being recognized. We have been officially invited by the Department of Agriculture of New Jersey, to cooperate with them in their Farmers' Institute work, by sending our members to fill engagements with our illustrated lectures. The State not only recognizes our work but pays expenses of our speakers. The opportunity to represent the American Association of Nurserymen and its members, is not overlooked. Can't members in other states get the same invitation to cooperate?

FROM PERU: From far-off Lima, Peru, we received a request for our illustrated lecture. They heard of it down there. We can more profitably fill some open dates in Michigan and Texas and Indiana and other states. The use of the slides costs members nothing—only express charges. Anybody can talk interestingly with these beautiful pictures of houses made homes. Your local Garden Club, Board of Trade or Civic Association would find enjoyment and profit in these slides with a talk from you.

TRAFFIC MATTERS: Mr. Sizemore says:

"The longer Government operation continues the more trouble I am having with the freight claims, and the Express claims are just simply a fright. There does not seem to be any head anywhere with them and from Traffic Papers it seems to be the general plan with them of 'passing the buck.'

"Further, hardly any of the Express claims sent me by the members have the Express Claim number and it makes double work. I have repeatedly during the last seven or eight years in talks before the convention told them to always get the claim number but it does not seem to soak in or if they do get it, it is lost or no record made of it. About five weeks ago, one member sent me about thirty-five Express claims that did not have the express claim number and they advised me they never received any. After building up the record it developed that a number of them had been paid or withdrawn.

"The decision referred to in the statement is, that suits for loss and damage must be instituted within two years and one day after arrival of the shipment or be barred by the statute of limitation. This clause has been sustained by the Supreme Court and by several State Courts but it seems to be in cases where no claim or any action was taken at all until after the clause had expired; but last spring the Joseph E. Decker Co., of Dubuque, had one of their claims returned by the carrier who simply advised that the two-year clause and one day had passed and they could not pay the claim altho it had been properly filed within six months after arrival and had been prosecuted right along and the papers had been back and forth between the R. R. Co. and the shippers for this and that information; so the Jos. E. Decker Co. have filed suit and are going to carry it to the Supreme Court of the U. S. as they claim it is a rank injustice to a shipper to worry along with a just claim for two years and decline to pay

it on account of not having been sued within the time limit and all shippers and traffic attorneys think they will win if it goes up that far. Some of the railroads were continuing to pay claims regardless of this clause but not long ago Director General Hines ordered all lines to quit paying such claims until the Commission decides whether they can or not.

"The Commission gave notice of a hearing in July, then postponed it till August, then to September and now say it will be sometime in October or November, so you will see what an unsettled state things will be in until the decision is rendered. If it is favorable to the shippers, I will immediately get in about \$1000, and it will help hurry up the others. If not favorable, it will cost the shippers lots of money but will let them know what to do hereafter and also will save the time now of fooling with claims that have passed the limit.

"In the meantime I am going right ahead with any claims that I have or will receive that the limit has expired on as, if I can get approved for payment and held for this decision, it will be that much time gained.

"Have enough claim work to keep me busy for the next sixty days or so, after which hope to be in shape to go after the members who have not sent in any and see what others I can pick up."

CREDIT & COLLECTIONS: Every Claim is given a number. Correspondence relating to it, is filed in numbered folders. If you ask us about your claim or claims, we have no way to find them under your name without going through 1800 index cards. When you ask about a claim, give the Bureau's number which is on every letter from us about it; if you haven't time to look in your file for it, give us the debtor's name. When writing about several claims, refer to each on a separate sheet of paper. It will help us. Collected a five-year old claim the other day; got \$250 from another by asking for it politely; have one to collect in Japan—and will collect it, too. Why not try us with some of your uncollectible accounts?

U. S. FIDELITY & GUARANTY CO'S DIRECT SERVICE. Costs \$5.00; includes a Directory of 12,000 local Attorneys, under bond to the Association for \$10,000; with it, you get blank-forms for use in asking those attorneys for credit-reports; blank draft-forms and names of banks in every banking town in America. The Directory alone costs \$10. You get the whole service for \$5 on account of the number the Association subscribed for. We have twenty unsold sets. At \$5 each. Do you want one? Take a chance, and return it if you don't want it. I recommend it as the best thing on the market, having used it for fifteen years. An individual subscription to the same service would cost you \$30. You can get it through your Association for \$5.

OKLAHOMA: Mr. Nesbitt was asked to publish his facts regarding firms he claims to know of who are delivering, or attempting to deliver, seedling trees for budded peaches. He has failed to do so. Having later published in Oklahoma papers the same vague and indefinite charges, while withholding information he claimed to have that would point out the offenders, I felt obliged to lay the facts before the same papers. We could do no more than offer to cooperate with Mr. Nesbitt and we close the matter by pointing out his unwillingness or

inability to substantiate his charges.

I appreciate the many helpful suggestions that have come to this office. Members all realize, I am sure, that your Association's Office can serve you efficiently and profitably only when all of you get and keep in close touch with the office with your letters of advice and instructions. When we know what you want, we will try our best to give it to you.

Yours very truly,
JOHN WATSON, *Executive Secretary.*

SOWING SEEDS BY AEROPLANE

It is reported that Representative Randall of California has urged the forestry service to start a reforestation programme for the fire denuded areas in the Sierra Madre range by using aeroplanes to scatter millions of seeds over the mountains as soon as the rainy season begins.

The suggestion indicates the average layman's knowledge of practical forestry or horticulture. Without considering what percentage would fall on grounds that were entirely unsuitable for germination, even if it fell on the most fertile and suitable soil possible, it would be an extremely small percentage that would be likely to survive. The laws governing the germination and growth of tree seeds are very similar to those governing vegetable or agricultural seeds and every gardener and farmer knows it would only be waste to scatter seeds without preparing the soil for their reception. Even when the soil is prepared for their reception there is still a chance that the weeds and tares, already in the ground would be most likely to survive and so choke out the young plants, even if the seed did germinate.

When we can reforest a country by scattering seeds from an aeroplane we shall have reached the stage when the spade and plough may be placed in a museum among the things that are obsolete.

If anyone wishes to form an idea as to what results would be obtained from sowing tree seeds by aeroplane, let him take careful note of the trees in their neighborhood which annually bear a crop of seed and note the percentage that escape the birds, mice, etc., and how many even get a chance to grow.

A SUBSTITUTE FOR GLASS

According to the Horticultural Trade Journal there is being put on the market in England a substitute for glass. A new substance composed of water and white gelatinous substance worked on to a light pliable but extremely strong foundation.

There are two kinds of foundation, one being fine wire, the other a fabric netting, and each has its particular adaptability to various horticultural purposes. The weight is only a fraction of the weight of glass. Risk of breakage is reduced to almost vanishing point. Transmission of light is only slightly less complete than in clear glass, and it is a frost register to at any rate, a very considerable degree. For frames, temporary coverings for late flowers, ripening seeds, and garden crops, for the lights of propagating pits, windows of potting sheds, etc., and other purposes, it promises to be an excellent and economical substitute for glass.

THE SECRETARY ON THE JOB

Mr. Watson addressed the following letter to a number of the Oklahoma newspapers. The letter is self explanatory and speaks for itself of the kind of work he is doing for the national Association and the good of the trade at large.

November 19, 1919.

Dear Sir:

I have received a newspaper clipping from your city, being an article entitled "Warning to Fruit Growers," signed by Mr. C. G. Nesbit, Orchard and Nursery Inspector of the Board of Agriculture of your State. The warning purports to be an effort to protect Oklahoma fruit-growers against unscrupulous nurserymen who may attempt to deliver seedlings for budded trees. And such effort, if based on information and belief is entirely proper and timely.

But may I not suggest that the purpose can be better served in a very direct way? I wrote Mr. Nesbit, objecting frankly to the broad scope of the charges, pointing out the probability that planters would be unable to judge for themselves who are the ones aimed at and who are the responsible firms of whom they may safely buy trees. Because, as a matter of fact, while all fruit-trees are scarce and high in price like everything else, still, they are to be had. And I asked Mr. Nesbit to publish just such a warning to planters as he has sent out but especially to identify the firms of whom he says he has information.

There are many entirely responsible nursery firms selling trees. This Association, the National trade organization, organized in 1875, includes nearly four hundred firms of the highest standing, some of them, naturally, being in your State. We properly feel that instead of vague and loose charges, subject to too general application, it would be much better to warn planters against the identical firms who are known to be attempting fraud. Mr. Nesbit claims to have that information and upon our invitation to publish it, he sends out the "Warning to Fruit Growers," without the very information they ought to have. And that is information that Mr. Nesbitt says he has, from a reliable source; he is able to identify the offenders for he says they are operating under permits issued by the Board of Agriculture.

We are not at all inclined to suggest how you should run your affairs. The conduct of Mr. Nesbit's office is properly of interest only in your State. But we are interested where an unnecessary reflection is cast upon a whole industry. We might suggest that permits under which known frauds are permitted by official sanction to operate, could be cancelled with service to your fruit-growers. We might point out that failure to expose the firms complained of, and known to your State Nursery Inspector, can serve only to disadvantage your planters and to shield guilty parties. Our interest as an Association is involved in this; that we should not be put under the ban by loose and general charges when your State Inspector claims possession of facts that identify the particular firms he has in mind—facts that would enable him to make

his charges definite and to expose some frauds. We have been trying to get Mr. Nesbit to do that.

Respectfully yours,

EXECUTIVE SECRETARY,
AMERICAN ASSOCIATION OF NURSERYMEN.

PROTECTING HYBRID TEA ROSES

Where the winters are liable to be severe, say north of the Mason and Dixon's Line, Hybrid Tea and other tender roses are very likely to get winter killed unless protected in some way.

Mulching the rose beds and strawing up the rose plants has become a fixed procedure in the season's routine of work in many gardens.

The strawing up of the rose bushes often proves a somewhat futile operation. A much more satisfactory method of protection is to mound the plants up with soil 12 to 18 inches high according to the size of the plant, leaving the upper part of the plant unprotected.

Even if the very worst happens and the plants freeze back to the top of the mound of soil, the killed portion of the plant can be cut away and the plants will only receive the necessary pruning.

The rose wood that was covered with soil will invariably be found to be plump and in fine condition to make a strong break below the cut and in very much better condition than wood which has only had straw to protect it from the drying frosty winds of winter.

PUTTING THE HORSE AHEAD OF THE LOAD

When we place prices ahead of production we are putting the cart ahead of the horse. Prices is the cart and production is the horse that draws the load. If we look after the production prices will take care of themselves, while if we interfere with prices we may stop production. The reason for all this is that high prices stimulate production, increase the supply of goods and thus automatically usher in lower prices. That is why an economist said that the remedy for high prices is higher prices. On the other hand if we force down prices arbitrarily, we will discourage production and cause a shortage of goods and still higher prices.

Prices are really only the thermometer that shows the condition of business. High prices indicate relatively low production to the demand while low prices indicate high production. The price thermometer now registers 100 degrees in the shade, but we cannot cool the air by breaking the thermometer.—Homer Hoyt, Professor of Economics, Delaware College, in *The Nation's Business* for November.

The following have been appointed on the Arbitration Committee of the National Association:—George Marshall, Chairman, Arlington, Neb.

Henry B. Chase, Chase, Ala.

Frank Stannard, Ottawa, Kan.

A. R. Robinson, Lexington, Mass.

E. W. Reid, St. Paul, Minn.

The National Nurseryman

Established 1893 by C. L. YATES. Incorporated 1902

Published monthly by

THE NATIONAL NURSERYMAN PUBLISHING CO., Inc.
Hatboro, Pa.

Editor ERNEST HEMMING, Flourtown, Pa.

The leading trade journal issued for Growers and Dealers in
Nursery Stocks of all kinds. It circulates throughout the
United States, Canada and Europe.

AWARDED THE GRAND PRIZE AT PARIS EXPOSITION, 1900

SUBSCRIPTION RATES

One Year in Advance \$1.50
Foreign Subscriptions, in advance \$2.00
Six Months \$1.00

Advertising rates will be sent upon application. Advertisements
should reach this office by the 20th of the month previous to the date
of issue.

Payment in advance required for foreign advertisements. Drafts
on New York or postal orders, instead of checks, are requested by the
Business Manager, Hatboro, Pa.

Correspondence from all points and articles of interest to nursery-
men and horticulturists are cordially solicited.

Photographs and news notes of interest to nurserymen should be
addressed, Editor, Flourtown, Pa., and should be mailed to arrive not
later than the 25th of the month.

Entered as second-class matter June 22, 1916, at the post office at
Hatboro, Pennsylvania, under the Act of March 3, 1879.

Hatboro, Pa., December 1919

Subscribers to "Nurserymen's Fund for Market Development"

A Christmas Wish

*The best wish the National Nurseryman can give
is that the Christmas spirit may have full sway
through the coming year in all transactions, which
is the only thing that will allay the unrest and bring
about Happiness, Prosperity and Peace.*

WHAT IS THE GOVERNMENT DOING FOR HORTICULTURE

In Democracies the people are
supposed to govern. Our govern-
ment is a democracy, we nursery-
men are a section of the people
and logically we should select the
governors and experts guiding
the destiny of the Horticulture of the country.

Is that faulty reasoning? or have we been so careless
and lax that we have not even tried to have a voice in the
selection of those forming the policy and laws that guide
the destiny of our business.

One would think that men of the craft would be chosen,
men who have been trained from childhood in the art of
horticulture, whose practical knowledge is beyond ques-
tion, men who do not have to make costly experiments to
prove theories that are as fundamental as the decalogue
or to refute those that are the unripe productions of
partly educated and inexperienced minds.

The government is supposed to be fostering the horti-

cultural interests of the country, but in the methods it is
using, is it not shackling private enterprise and effort to
such a degree that it will produce results that are the
exact opposite to those that are to be the most desired?

There may be those who favor government ownership
to the nth degree and perhaps they are right where it con-
cerns natural resources that rightly belong to the people
as a whole, but the forces that make for horticultural
progress such as labor experience, untiring effort, skilled
workmanship and concentrated interest are best devel-
oped by private enterprise.

Judging from comments in horti-
cultural papers the Gould Bill
seems to have the endorsement of
the Nursery Trade and why shouldn't it? It is proposed
for their especial benefit. The Government thoughtfully
and deliberately under the advice of its own particular
experts, has banned Foreign sources of supply, so of
course it is necessary to develop domestic sources of pro-
duction, and prove that the plants hitherto imported can
be grown in the United States. The practical, old school
nurseryman may feel a bit resentful with so much pa-
ternal oversight, he knows so well there is no substitute
for hard work when it comes to profitable production of
nursery stock.

He has failed in producing many items in a commercial
way and yet knows at the same time it is not impossible to
grow them from a horticultural point of view. This, how-
ever does not always meet with commercial success.

The Government experiment stations supported by
taxes and managed by well educated college men, dille-
tant workers, experimenters, can of course grow any-
thing in a perfectly eugenic way and make a report on it
but the nurseryman has to grow it and make a profit on it.

We hope if the Gould Bill is approved and the necessary
appropriations forth coming the Government experts will
not over look this phase of their experiment work.

Editor National Nurseryman:—

We think your editorial on the subject of "Teaching
the Public How to Buy." is the best you have written. It
is the best kind of publicity for us and will bring the
greatest national results if we can train the average pur-
chaser to know quality when he sees it and not always
look for size.

Appearances have led to disillusionment in more things
than could be named in short space but in no particular
line is it more deceiving than the nursery stock. Often
the largest and handsomest looking trees do not compare
with the smaller and less attractive ones. There are great
things in store for the nurseryman in the future for us to
live long enough to have a good share of it if we take it
up and take hold of it. There is so much to be done in
getting together and keeping together that we need to
know everything that is going on in the trade as well as
keeping time on the public pulse.

RUTH DAY,
Manager Overman's Nursery,
Spokane, Wash.

AMERICAN ASSOCIATION OF NURSERYMEN

BULLETIN: Subject—SURPLUS STOCK
Let the Association help sell your products
Help it to establish a

BUREAU FOR FINDING STOCK

Every day Mr. Watson is receiving requests for knowledge of where this or that plant may be found. To give the information now—even though he possessed it—would be unfair to members whose stock he has no personal knowledge of. In these requests are opportunities for sales—so the American Association of Nurserymen hastens to provide its members with the facilities to secure this business.

List the stock you're "long on" or any items you wish to sell—1 or 5000, it makes no difference—upon standard 3 x 5 inch filing cards. One variety to a card—the number and size you have, the date and your name and address.

Philadelphus coronarius grandiflorus

550.....3 to 4 ft.

1500.....5 to 6 ft.

Jones Nursery Co.,
Jonesville, Neb.

9-26-19

Send these cards in at any time to Executive Secretary Watson's office, will merely mention the name and address in cabinets provided by the Association.

When inquiries are received from any source for a variety of plant you list in this way—the reply, from Mr. Watson's office, will merely mention the name and address of every member listing the variety inquired for. It will give only the information you provide without additional comment of any kind. Prices and references to quality will not be furnished. The applicant for the information is left free to inquire about these and other particulars of any or all members listing with the Bureau the varieties he is interested in.

If sufficient members list their stock, the Bureau may be advertised, that it may become a clearing-house for nursery stock generally. The information of what is for sale will be given anyone, but the privilege of listing stock is for members only. Information as to quantities will be given only to members.

In order to have cards filed uniformly, use The Official Code of Standardized Plant Names as prepared by American Joint Committee on Horticultural Nomenclature and adopted by the Association as standard, for names of varieties—or otherwise your stock may be filed differently and lost track of in the Association files, when being inquired for. Cards may be filed or withdrawn singly or in quantities at any time you wish.

The Executive Secretary's office is ready to record your stock as soon as listed in the manner prescribed. Buyers for Spring 1920 are already making inquiry.

Let your Association help to "put you next" to these buyers—and use the Bureau freely yourselves to locate "shorts."

This service is authorized by the Executive Committee in accordance with Article 5 of By-Laws of the A. A. of N.

J. EDWARD MOON, *President*

American Association of Nurserymen

JOHN WATSON, *Executive Secretary*

400 Nassau Street
Princeton, New Jersey

CONVENTION DATES

The Executive Secretary wishes to cooperate with all affiliated State and other nurserymen's associations and is anxious to attend as many conventions as possible. Invitations are for conflicting dates. Some of the local associations fix their meeting dates and some leave their officers to arrange them. Now, if all Secretaries of State and local associations will notify me of conventions to fall within the next three months, it may be that upon consultation and comparison of dates, some arrangements might be made to avoid other conflicts and thus enable President Moon, myself and others invited, to attend more meetings. We are anxious to do that.

JOHN WATSON, *Executive Secretary*,
American Association of Nurserymen,
Princeton, New Jersey.

IS OUR HOUSE IN ORDER?

Many nurserymen were incensed at an article by Mr. Lovejoy in one of the September numbers of Country Gentlemen, wherein numerous sweeping charges of unfair practices by nurserymen in several states, were alleged. The charges were so inclusive as to practically involve the whole industry.

Later Mr. Nesbitt, Orchard and Nursery Inspector for Oklahoma, claimed to have knowledge that many nurserymen were about to distribute among unsuspecting buyers, "mowing-machine budded" peach trees. A notice substantially to this effect was sent out from his office, with the consequent result, it is claimed by Oklahoma nurserymen, of injuring their business.

Numerous nurserymen have written the officers of their Association about these matters. Mr. Watson and I, in the name of the A. A. of N., have urgently invited both Mr. Lovejoy and Mr. Nesbitt to submit the facts in their possession to our Vigilance Committee. They have been told that the Constitution of our Association provides a means of ridding our membership of persons found guilty of these alleged practices, and that we need the facts to see if our House is in order and if not, the opportunity to put it in order. As matters now are, their sweeping charges indict the whole industry, and bring it into disrepute with consequent losses.

The officers of the A. A. of N. are intent on running these charges down. We believe this to be for the benefit of the Association and our duty. Meanwhile, we are writing articles for garden publications to impress the public with the assurance of reliable dealings, if members of the A. A. of N. are patronized. Mr. Watson has

Princeton Products

are

Ornamental



Trees, Shrubs and Evergreens
of high grade
for the wholesale trade

Princeton Nurseries

Princeton in New Jersey

December, 1919.



SPRAYING MATERIALS.

In the markets, fruits and vegetables are graded as sprayed or unsprayed—higher prices being asked and paid for the sprayed grades. This is logical with shrubs, etc.

We Manufacture High Grade Spraying Materials—consequently our guarantee stands for something:-

Bordeaux Mixture
(Paste & Powder)

Arsenate of Lead
(Paste & Powder)

Blue Vitriol
Egg Preserver
(Water Glass)

Kalidor

(Virulent poison combined with Bordeaux Mixture in powder form.)

Led-Bor

(Bordo-Lead of highest analysis)

Fish Oil Soap
Calcium Arsenate
(A most efficient poison for the Least Expense)

Paris Green

Write for interesting literature on
Spraying materials, Insecticides, etc.

NITRATE AGENCIES

HOME OFFICE
85 Water Street
N. Y. City
FACTORY:
Brooklyn, N. Y.

BRANCHES:
Columbus, Ohio
Savannah, Ga.
Norfolk, Va.
Jacksonville, Fla.
New Orleans, La.

Scarcity of Stock

makes our offer of choice shade trees and shrubs

Interesting Reading

We offer in assorted sizes Norway and Sugar Maples, Horse Chestnut, Catalpa Bungei, European Sycamore, American Elm.

In shrubs Althea, both bush and tree shape; Cornus Siberica; Deutzias; Hydrangea P. G.; Kerria Japonica and Japonica Variegated; Philadelphus assorted; Prunus Pissardi; Golden Elder; Spirea Opulifolia Aurea, Thunbergii and Van Houtte.

In evergreens Douglas Spruce, White Spruce, Norway Spruce; White and Scotch Pine; Retinospora Picifera and Picifera Aurea, Plumosa and Plumosa Aurea; Arbor Vitae Columbia, Compacta, Ellwangeriana, Lutea, Siberica and Siberica Lutescens.

W. B. COLE

Painesville - - Ohio

Are You Troubled

with lost or "astray" shipments of nursery stock, to say nothing of other difficulties experienced through the use of "cheap" tags?

Get rid of your shipping troubles, just "put it up to Denney" to make 'em right.

"Denney Tags get there with the goods"

Tags for every need of the nurseryman and a reputation for giving you "what you want when you want it." Write us about it TO-DAY.

Rawhide Shipping Tags and Tree Labels.

The Denney Tag Co.

West Chester, Pennsylvania

speaking engagements at which the advantages of purchasing from our members are explained. A large committee to place representatives, with the message of the A. A. of N., on the program of every Horticultural meeting we can reach, is under appointment and some addresses have already been given. Personally I am asking the opportunity to appear before the American Forestry Association and the Garden Club of America. All of this is being done in an effort to counteract the unfavorable publicity nurserymen have received.

We believe our membership to be composed of honorable men who seek to deal justly and honestly in all their affairs. We are disturbed and handicapped in efforts to vindicate our members in the public mind, because we receive reports from our own members that nurserymen either are doing or are about to do these very things of which Nesbitt and Lovejoy accuse us. Members who intimate that they have this knowledge, do not wish to give our Vigilance Committee evidence they possess, because some of these offenders either are or may become their customers.

Can any nurseryman doing business with another who is guilty of dishonest or unfair practices afford to shield his customer for the sake of a continuance of his business? Will not the dishonest man when apprehended defend himself by the statement that he buys his trees of you? Thereby he attacks your reliability along with his. If our products were trade-marked, it might be different; but now shyster nurserymen A. may buy 1000 honest, "true-to-name" peach trees of reliable nurserymen B; puts 4000 "mowing-machine budded" peaches or other fraudulently represented stock with them and bases his claim for reliability on the fact that he secures his trees of B. Can any honest intentioned reputable member of the A. A. of N. afford as a matter of dollars and cents to himself, to carry the burden of unfair, dishonest dealings on the part of any other member, without seeking to reform him or to purge the membership of him, by not letting our Vigilance Committee have the evidence which he possesses?

The Market Development Movement has been taken over by the A. A. of N. Next year each member will pay as dues to the Association $\frac{1}{4}$ of 1% of his gross business. He doesn't pay an amount as large as this for the opportunity of the sociability he enjoys at the Convention. He will pay it largely for advertising and no matter how friendly he may be with a nurseryman, that knowingly mislabeled his stock or indulges in other fraudulent practices, he cannot afford to carry such a member along with him in the A. A. of N., which should be so certain of the integrity of its members, that it could spend from \$20,000 to \$30,000 a year to tell the public, that when a member grows it, it is safe to buy.

In view of the effort being made right now, by the Association, in the press and on the speaker's platform, to tell the public that the A. A. of N. is a League of Nurserymen whose products are safe to buy, isn't it unprofitable to the member, who has evidence against any other member and unfair to those who represent your Association publicly, to withhold such evidence from our Vigilance Committee, who will judge from the facts, and help us to put our house in order? Membership would be of

greater value in an Association of fifty nurserymen with unsullied reputations for honest, reliable dealing, than in an association of 1000 that provides a cloak under which any unscrupulous firm may masquerade.

J. EDWARD MOON,

President, American Association of Nurserymen.

Morrisville, Pa., November 20, 1919.

RESOLUTION ON REPLACEMENT OF NURSERY STOCK

To Whom It May Concern:

The Pacific Coast Association of Nurserymen during their annual convention held at Portland, Oregon, July 8, 9 and 10, 1919, after carefully considering the question of replacement of nursery stock and the resulting abuse which has developed from too frequent general promises made in the past, decided by unanimous vote that while customers will be entitled to Good Condition of nursery stock ordered, that henceforth there shall be no promise made to replace nursery stock which arrives at destination in good condition.

By order of the Pacific Coast Association of Nurserymen.

C. A. TONNESON, *Secretary-Treasurer.*

Tacoma, Washington, August 21, 1919.

Princeton, N. J., November 27, 1919.

To the Editor,

BUREAU FOR FINDING STOCK:

Helping Members to Sell Surplus

Here is a new service for Members, offered now but provided for as far back as the Detroit Convention, covered by Article 5 of the By-Laws adopted then. Pursuant thereto, it is now put in operation by direction of the Executive Committee.

It is something progressive, constructive, of direct and immediate benefit to every member that will use it. It requires only the filing of statistics in the form required for uniformity in filing.

The test of every proposed activity must be: Will it be of value? And next: Will it be available to every member alike? Not all can benefit in the same degree, from any Association work; but the opportunity must be the same always. Every member must be on the same footing with every other member. Ours is a cooperative organization, and Association benefits must be available to all, fairly, impartially, equally.

This new service, the officers think, will help members solve the vexed problem of Surplus.

Yours truly,

JOHN WATSON, *Executive Secretary,*
American Association of Nurserymen.

Treasurer J. W. Hill, of the American Association of Nurserymen, has been ill for several days and confined to his home. He has recovered sufficiently to be back at his desk again.

Vincennes Nurseries, W. C. REED, Prop.

VINCENNES, - - INDIANA

Cherry 2 Year Usual Supply.

Demand very heavy no more Car lots to offer, can furnish limited amounts in assorted Orders.

Cherry, One Year

Thrifty and nice, will only dig limited number. Not as heavy as usual owing to cold April. Will make excellent two year. Prefer to carry over if our customers will let us.

Peach, One Year

Limited amount in assorted Orders only.

Apple 2 Year

General List Leading Varieties in limited quantity.

Hardy Nut Trees

Grafted and Budded Pecans, English Walnuts and Grafted Black Walnuts in the best Varieties.

Trade List now ready.

Subscribers to "Nurserymen's Fund for Market Development."

FAIRFIELD NURSERIES

FRUIT AND SEED FARMS

I have sold all the stock I will have this Spring, but this Summer I will be ready to book orders for Fall, 1919 and Spring 1920 delivery.

The war is over and good times are ahead. No more guns or ammunition will be needed, but you will want more of my Grape Vines, Scarlet and Crimson clover and Cow-Peas than ever before.

Keep me in mind.

CHAS. M. PETERS

P. O. Address Salisbury, Wicomico County, Maryland.
Long Distance 'Phone and telegraph, Salisbury, Maryland.

Hill's Evergreens

SINCE 1855

Complete stock of leading varieties in Firs, Spruce, Pines, Arborvitae's, Yews, etc.; in small, medium and large sizes, at reasonable prices. Also good supply of Deciduous Tree seedlings. Small shrubs for Nursery Planting, etc. Careful packing given special attention.

Write for Wholesale Trade List. Use printed stationery as Wholesale prices are extended only to those engaged in the Trade.

The D. Hill Nursery Co., Inc.

Evergreen Specialists.

Largest Growers in America.

Box 401, Dundee, Illinois

THE WESTMINSTER NURSERY

J. E. Stoner, Prop.

WESTMINSTER

MARYLAND

Offers for Fall 1919

250,000 Cal. Privets in grades, 1, 2, and 3 yrs.

300,000 Asparagus, 2 and 3 yr., Asst.

Barberry Thun., 18-24 in. and 2-3 ft.

Lombardy Poplars in grades 6 to 16 ft.

Oriental Planes in grades 6 to 12 ft.

Tulip Poplars, 6-8 ft.

Horse Chestnuts in grades 7 to 12 ft.

Catalpa Spec in grades 8 to 12 ft.

Butter Nuts 4 to 8 ft., 1 grades.

Can supply the above in car lots or less.

We also have a good stock on Spireas Van., 2-3 ft., Deutzias Pride of R., 2-3 ft. and 3-4 ft., Altheas Asst., 3-4 ft. and 4-5 ft., Hydrangeas P. G., 2-3 ft. Write for Prices.

Strawberry Plants

Only

Let us book your order now while our stock is complete.

More than forty million plants Standard and Everbearing.

More than 200 acres of healthy true-to-name plants grown on light new soil. Quality was never better.

Shipped direct to you or your customers under your own tag. We please others, and would like to try YOU.

E. W. Townsend & Sons
Wholesale Nursery

SALISBURY, - - MARYLAND

More than fifteen years growing plants for nurserymen and dealers.

We are now ready to quote lowest prices on

FRUIT, SHADE AND ORNAMENTAL TREES, SHRUBS, EVERGREENS, VINES and HERBACEOUS PLANTS

FOREST TREE SEEDLINGS we only have in limited supply this season, and would advise placing your orders early.

TREE SEEDS we can supply in limited quantities.

Send list of your requirements for lowest prices. Trade list ready.

The Willadean Nurseries
Sparta, Ky.

For FUMIGATION With

HYDROCYANIC ACID GAS

"CYANEGG"

Sodium Cyanide in egg shape, each egg weighs as near one ounce as possible. Destroys scale insects on Fruit Trees, Nursery Stock, Plants under glass and in Greenhouses.

Manufactured in U. S. A. by

The Roessler & Hasslacher Chemical Co.
100 William St. - - New York, N. Y.

McHUTCHISON & COMPANY
New York, N. Y.

November 13th, 1919.

The Federal Horticultural Board,
Washington, D. C.

Gentlemen:—

By request of several of our Canadian customers we have received prices from them upon Holland nursery stock, consisting for the most part of Azalea Mollis, Rhododendrons, Magnolias, Boxwood, Roses, etc.,—which Canadian laws do not prevent Canadian florists from importing to stimulate their own commerce, as our U. S. laws do.

These nursery stock items are mostly balled, i. e. with earth about the roots—and according to one of your recent letters you advised that such stock cannot come through U. S. entry ports when earth is about the roots, even though they are bonded through to Canadian ports.

You will see how your regulations work to the disadvantages of American trade, and will mean that such shipments will have to be forwarded via English and Canadian ports, thus driving commerce away from American ports. It will also be a disadvantage to the Canadian importers, as they will get slower service at an increased price.

Before issuing our quotations we suggest, as patriotic Americans, that you reconsider the matter. As these shipments are not unpacked in the U. S. there is not the slightest danger of introducing insect pests or plant diseases in the U. S. through them, and we do not think it is your intention to drive commerce away from the U. S. without adequate reasons.

In quoting to Canadian firms we must either say that the shipments can come in bond through New York ports as usual, or that we can book orders only when the importer makes arrangements for shipments to come via English and Canadian ports, so we trust you will give proper consideration to the matter and advise us your final decision as soon as possible. We are receiving almost daily requests from Chamber of Commerce and other commercial bodies to boost foreign trade, but so far as our business is concerned your regulations block any efforts we could make.

Yours truly,
(Signed) McHUTCHISON & Co.

FEDERAL HORTICULTURAL BOARD
Washington, D. C.

November 17, 1919.

McHutchison & Co.,
95 Chambers St.,
New York, N. Y.

Gentlemen:—

In reply to your letter of November 13th, I would say that although our regulations prohibiting the importation into the United States of plants with sand, soil and earth on their roots even for transmission in bond do work some disadvantage to American brokers, they are designed to act to a far greater advantage to the growers of plants in the United States. One of the most important sources of foreign insects which have come into the United States and have attacked our nursery crops, farm crops and

wild and ornamental trees has been the balls of earth about the roots of imported plants. Many insects spend their lives buried in the soil and emerge from this soil to attack our plants. Even though the soil is tied up in sacks and packed in boxes these insects may emerge and fly away from a package, thus gaining entry into this country. It is therefore one of the very necessary safeguards of this immediate transportation in bond that the plants shall not have sand, soil or earth on their roots and that bulbs shall not be packed in sand, soil or earth, except such sterilized soil as is provided for in Amendment 1 to Regulations Supplemental to Notice of Quarantine 37, a copy of which I enclose.

Very truly yours,
(Signed) R. KENT BEATTIE,
Pathologist in Charge, Foreign Plant Quarantines.

HOME GARDEN FRUITS (Continued from last month)

In these days of government and state departments of agriculture, of agricultural colleges, and experiment stations, and of huge commercial fruit growing interests, amateur fruit growers are too prone to consider themselves as "merely amateurs" and therefore relegated to a less useful class than that of the scientists. From the spectacular standpoint they are doubtless correct, because they have neither institution nor title to push them, whether worthy or not, into prominence. Nevertheless, without the least intention to belittle the work of the scientists it must be said that the world owes an incalculable debt of gratitude, to say nothing of monetary considerations, to countless amateurs—printers, merchants, doctors, lawyers, lumbermen, millers, editors, factory hands and last, but by no means least, nurserymen and farmers—who had no "college training" in agriculture, who in no sense considered themselves scientists, but who used what knowledge they had to solve pomological problems for the love of still better knowledge to give to the world.

Perhaps the greatest service they have rendered is in the origination of new varieties. In this work they were largely gropers because the laws of plant breeding a generation ago were far less understood than today. Through enhanced knowledge this same field of variety origination offers even more wonderful opportunities than in the past. While beyond the scope of this address, I am eager to point out that herein lies the greatest interest for the amateur—this matter of variety origination; for, just as in the past, the originator of new varieties may do his work in a back yard, as did Edward Staniford Rogers in his garden, of which Marshall P. Wilder wrote, "It is 150 years old; a cold matted soil, filled with old apple and pear trees, currant bushes, flax and everything mingled together . . . a close, hived up place in the city of Salem;" nowadays with increased knowledge of the laws of plant breeding we have far greater chances of making fortunate combinations of parents and of finding varieties superior to those now under cultivation than in bygone years.

In support of this contention let it be remembered that Luther Burbank, himself a Massachusetts product, started his business as a factory hand but became a grower of

Retinosporus Pisifera, Squarosa Veitchii

Per 100 and per 1000

AUDUBON Nursery, H. Verzaal, Prop., P.O. Box 275, Wilmington, N. C.**Ornamental
Nursery Stock**

TREES, SHRUBS, EVERGREENS,

VINES and HERBACEOUS PLANTS

Large assortment. Long list of varieties and sizes

Get our New Trade Catalogue,—ready September.

Spring price list out of date.

Thomas B. Meehan Co.

WHOLESALE NURSEYMEN,

DRESHER

PA.

Subscribers to "Nurserymen's Fund for Market Development."

Willowdale Nurseries

KENNETT SQUARE, PA.

WE OFFER FOR FALL 1919

100,000 Privet in sizes from 2 to 5 ft.

Oriental Planes, American Elms.

Norway, Sugar, Sycamore and Silver Maples.

Pin and Red Oaks.

American, European and Silver Linden.

White Dogwood, Horse Chestnuts and Lombardy Poplars.

Salisburias and Tulip Trees.

Butternuts, Filberts, Walnuts and Pecans.

Evergreens and Shrubbery in good assortment.

Have many large Shade Trees in caliper from 3 to 8 inches.

Send list of wants for prices.

THE RAKESTRAW-PYLE CO.

KENNETT SQUARE

PA.

We will be pleased to make you prices on any of the following stock, well grown, well dug and well packed:

8000	Spirea Van Houtte	2-3 ft.
7000	Spirea Van Houtte	3-4 ft.
2000	Polish Privet	2-3 ft.
500	Purple Lilac (stocky)	3-4 ft.
1000	Lonicera Belle Albida	2-3 ft.
300	Golden Elder	2-3 ft.
200	Cornus Siberica	2-3 ft.
300	Snowball	2-3 ft.
	European White Birch Low branched	6-8 ft.
	Box Elder	6-8, 8-10, 10-12 up to 2 in.
	European Mt. Ash	5-6 and 6-8 ft.

The Coe, Converse & Edwards Co.

FORT ATKINSON, WIS.

**NURSEYMEN
Florists and Seedsmen**

Headquarters for first-class help, furnished free of charge to employers. Tractor hands, teamsters, general men for farms, single and married, all nationalities.

Phone Main 5074

DIAMOND AGENCY

557 W. MADISON STREET,

CHICAGO, ILL.

CHAMPION NURSERIES, Perry, Ohio**Offer the Following Stock**

Birch, Cut Leaf Weeping, 4 to 5 ft., 5 to 6 ft., 6 to 8 ft., 8 to 10 ft., 10 to 12 ft. Spirea Van Houttii, 2 to 3 ft., 3 to 4 ft. Spirea Anthony Waterer, 18 to 24 in., 2 to 3 ft. Privet, California, 15 to 18 in., 18 to 24 in., 2 to 3 ft. Privet Amoor River, North, 18 to 24 in., 2 to 3 ft., 3 to 4 ft. Also fair stock of Apple, Pear, Peach, Plum, and Cherry, Catalpa Bungii, Shrubs, Roses and Vines.

H. J. Champion & Son, - Perry, Ohio**F. & F. NURSERIES**

Springfield, N. J.

Our SPECIALTY

Growing evergreens for lining out on contract.

CANNAS

A large stock of several varieties. Prices right. Let us book your order now for shipment at proper time.

PARKER BROS. NURSERY CO.

FAYETTEVILLE,

ARKANSAS

**IBOLIUM THE NEW
HYBRID**

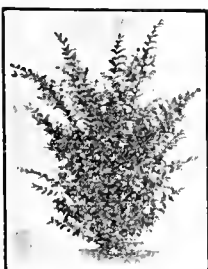
(L. Ibota x Ovalifolium) Now sent out for the first time.

The Elm City Nursery Co. Woodmont Nurseries, Inc. New Haven, Conn.

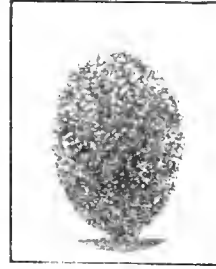
Introducers of BOX-BARBERRY, well rooted summer frame cuttings,

Inquire for further information. "Plants in storage for immediate Shipment"

When writing to Advertisers please mention the National Nurseryman.



Natural Habit



When Trimmed

vegetables and seeds before he became a variety originator. Though the practical results of his work have been exploited, magnified, distorted, and even caricatured by the press, they doubtless compare favorably with those of other less conspicuous plant breeders; but his results, though great, seem to be of smaller consequence than his influence in awakening general interest in plant breeding.

He has proved that plants unlike anything hitherto known can be originated, so his work has become an inspiration to countless amateurs who seek to follow in his footsteps or blaze new trails for themselves. In this direction therefore lie the greatest rewards, not perhaps of money, but of interest and service in the growing of home garden fruits.

INDEX TO VOLUME XXVII

- | | | | | | |
|--|-----|--|-----|---|-----|
| A Substitute for Glass..... | 315 | Chinese Products of Interest to Nurserymen | 20 | Freight, Proposed Increase in rates for Perishable..... | 223 |
| Activities of the National Association | 274 | Chronaultrus Virginica | 185 | French Nurseryman's Opinion on the Plant Embargo, A..... | 12 |
| Address by J. Fred Ammann..... | 253 | Christmas Greens | 10 | Fruitland Nurseries, P. J. Berckman Co., Inc., Sigmund Tan-nock Buys..... | 39 |
| Address by M. L. R. Latshaw.... | 191 | Components | 230 | From the Federal Horticultural Board | 291 |
| Age of Seed Does Not Cause De-terioration of Type..... | 290 | Convention Dates | 318 | Future Stock | 227 |
| Allees in French Landscape Gar-dening | 313 | Corn Borer Quarantine, The Pro-posed European..... | 72 | Garden A | 201 |
| Amelanchiers | 232 | Correspondence of McHutchison & Co. and Fed. Hort. Board.... | 322 | Garden Magazine, The..... | 44 |
| Amer. Association of Nursery-men (Bureau for finding Stock) | 318 | Court Awards Damages for the Destruction of Trees..... | 39 | Georgia-Florida Pecan Growers Ass. | 140 |
| American Horticulture | 228 | Crown Gall | 221 | God's Richest Gifts are Free to All | 109 |
| American Seedsman, The..... | 218 | Crown Gall Injury in the Orchard | 139 | Golden Star | 16 |
| Annual Convention, Forty Fourth | 186 | Damages for the Destruction of Trees, Court Awards..... | 39 | Good Experience | 170 |
| Annual Convention, The Forty Fourth | 158 | Does not Approve of New System of Dues..... | 223 | Good Promise for Spring Business | 18 |
| Annual Dinner of the New York State Nurseryman's Associa-tion | 78 | Does Publicity Pay?..... | 161 | Good Suggestion, A..... | 170 |
| Answers to Correspondents..... | 254 | Douglas Nurseries Sold, The.... | 172 | Growing and Preparation of Ever-greens and Their Uses in Landscape Gardening..... | 224 |
| Answers to Correspondents, Best Time of Sowing Perennials.. | 73 | Economic Botany..... | 163 | Guarantee as a Business Builder, The | 162 |
| Apple Bud Selection and Apple Seedlings from Selected Trees | 140 | Editorial | | Halesia Tetraptera var. Monticola | 292 |
| Apple Crop of Nova Scotia..... | 277 | As Others See Us..... | 276 | Happy Release, The..... | 218 |
| Apples from the United States, Export of | 112 | Bugs | 45 | Heard at the Convention..... | 196 |
| Apples, Future Shortage of..... | 142 | Business Conditions..... | 107 | Herbaceous Plants..... | 201 |
| Apple, Oswego | 136 | Code, Living up to a..... | 14 | He Shot Low..... | 231 |
| Apple Report, Special Regional.. | 255 | Commissions | 45 | Home Garden Fruits..... | 302 |
| Apple Trees Explained, Mysteri-ous, Diseases on | 138 | Convention, The | 198 | Home Surroundings, Beautifica-tions of The..... | 102 |
| Apple Trees, Leaf Hoppers, Injur-ious to..... | 222 | Consistency | 15 | Honeysuckle Hedge..... | 217 |
| Appreciation of a Great Character, An | 109 | Enforce the Law..... | 291 | Horticultural Education..... | 225 |
| Are you Getting your Share of the Cream | 230 | Is it Germane to the Subject?.. | 223 | How and When to Plant..... | 296 |
| Autumn Colors | 300 | It Rings True | 252 | How it was "Did in Dixie"..... | 162 |
| Avenue Trees..... | 130 | Law, and the Nurseryman, The | 252 | How to Become Famous..... | 111 |
| Baby Ramblers..... | 228 | Teach the Public to Buy..... | 276 | Huntsville, Prominent Nursery-man Visited..... | 15 |
| Baby Ramblers..... | 290 | Losses | 107 | Galley 2, Index. | |
| Baby Ramblers at the Convention, The | 196 | Nursery Fraud Act in Arkansas, The | 198 | Illustration | |
| Baby Rambler Notes..... | 251 | In Re Quarantine | 37 | American Association of Nur-serymen in Session..... | 192 |
| Beautification of the Home Sur-roundings | 102 | Permits to Import..... | 253 | Celastrus Grown in Standard Form | 289 |
| Bill H R 5939..... | 300 | Plant Embargo, The..... | 72 | Chionanthus Virginica in Full Bloom | 185 |
| Blueberry Plants, Twenty Five to Fifty Dollars, will be paid for Specially Fine..... | 168 | Plant Embargo, The Foreign... .. | 14 | Charles Sizemore..... | 159 |
| Book Review | | Plants Have No National Bound-aries | 138 | C. S. Harrison | |
| Manual of Tree Diseases..... | 17 | Production and Distribution.... | 164 | Espalier Apple Tree, A Well Trained | 158 |
| Manual of Vegetable Garden Insects | 17 | Quarantine | 137 | Euonymus radicans | 9 |
| Borers | 170 | Real Plantsmen Needed..... | 137 | F. F. Rockwell | 79 |
| Bridging the Gap | 165 | Reconstruction | 164 | Honeysuckle Trained as a Hedge | 217 |
| Bureau for Finding Stock..... | 320 | Seventeen Year Locusts, The.. | 223 | John Watson | 274 |
| Can You Beat It?..... | 250 | Suggestion Regarding Quarant-tine 37A..... | 276 | J. R. Mayhew..... | 158 |
| Capital and Labor..... | 17 | The Gould Bill..... | 317 | J. W. Hill..... | 159 |
| Capri Wasps and the Fig..... | 229 | Trade Prices..... | 198 | Ilex Crenata and Other Ever-greens | 245 |
| Care of Large Trees..... | 16 | What is the Gov. doing for Hort. | 317 | Montmorency Cherry Orchard.. | 47 |
| Catalogues, Size of..... | 130 | Embargo, The Plant..... | 66 | Montmorency Cherry Tree.... | 42 |
| Cause Enough..... | 231 | Endorses, The Optimist..... | 43 | Oriental Plane as an Avenue Tree | 129 |
| Celastous Obiculatus | 289 | English Ivy..... | 226 | Paul V. Fortmiller..... | 290 |
| Celastous Articulatus | 112 | Evergreens .. | 104 | P. Burnett Kelly..... | 290 |
| Census of Agriculture..... | 170 | Exhibits at Convention..... | 190 | Pyrus pulcherrima Scheideckeri | 37 |
| Census of Nursery Stock Proposed | 200 | Fall Planting | 246 | Sobaria arborea..... | 65 |
| Chicago Chosen for the Next Con-vention | 197 | Family Tree, The..... | 22 | Soldiers Monument..... | 255 |
| | | Farm Tractor, The..... | 101 | Sophora Japonica..... | 98 |
| | | Federal Horticultural Board, From The | 291 | Suberbs of 'Etampes Castle Brunehaut, The Fine Allees.. | 13 |
| | | Federal Horticultural Board's side of the Plant Embargo, The.. | 68 | What we may Expect..... | 292 |
| | | Figures of the Nursery Business in Texas..... | 130 | | |
| | | Flemer, Jr., William..... | 38 | | |
| | | Florist's Exchange, Sympathy for The | 291 | | |
| | | Flowering Crabs..... | 37 | | |
| | | Foreign Nursery Stock Quarantine | 74 | | |
| | | Forty Fourth Annual Convention | 186 | | |

THE American Association of Nurserymen

Notes from the Executive Secretary's Office

GOULD BILL:—Some members have responded to the request for instructions, but not enough to form an opinion as to the Association's wish. You can probably get this, if you want it. What are your wishes in the matter?

STATISTICS:—That matter had been reported on by President Moon. The \$50,000 appropriation has been approved by Secretary Houston; but there must be strong and numerous requests from Nurserymen. The Department of Agriculture has facilities for gathering these Statistics and in the readjustment of trade under new conditions, it seems important that figures showing available stock in the country be secured and through a neutral and independent agency. The information would seem to be of great value to nurserymen especially.

MARKET DEVELOPMENT:—A very practical article was distributed on "Fall Planting," to 800 newspapers who are using our service. Copies have been sent to members. Later articles will be prepared by writers of national reputation and it is planned to provide different articles to cover different sections and different conditions.

CREDIT & COLLECTION BUREAU:—Members will please write our office at Princeton, New Jersey, about their claims when they wish information, giving the Bureau's number or the debtor's name. Remember, your Bureau has unusual facilities for supplying you with prompt and accurate Credit information on those in the trade; where we haven't it, we can get it.

U. S. FIDELITY & GUARANTY Co.:—This Special, direct Service is available at a cost of \$5.00 per year. It includes a Directory of the 12,000 local Attorneys under bond to the Association; the Directory's price alone is \$10. You are supplied also with blanks that call for free credit reports from these Attorneys.

SURPLUS STOCK:—What would the members think of listing their Surplus in the Secretary's office, to be reported to those inquiring for it? The Secretary is every day receiving inquiries of that nature. Obviously, he cannot recommend anybody's stock, even though knowing where the things wanted can be obtained; the Secretary represents all the members; but it has been suggested that on inquiry for an article, the names of all members having it could be furnished by the Secretary, if that information were on file here. That is offered for your consideration.

HORTICULTURAL SOCIETY MEETINGS:—Should be attended by nearby nurserymen. We overlook a great opportunity to present ourselves and our industry but particularly our Association, to the bodies whose interests are ours too. One or two Nurserymen should be on every

program of every fall and winter meeting of fruit-growers. In our own trade conventions, we experience no difficulty to get representatives of the Agricultural Colleges, the Inspection Departments and others, to address us; when we overlook the invitation, we are sometimes reminded that speakers are available. We are helped and our friends in other activities are given opportunity to present themselves and their work favorably. Can't we do the same for ourselves? The nursery industry and the serious aims of this Association deserve and even require to be presented to planters and fruit-growers by those in the trade, who know most about what we are doing. There are so many misconceptions about the nursery business, so many wrong conclusions drawn from well-meant but hurtful articles in occasional papers, that we owe it to ourselves to correct wrong impressions by talking for our Association whenever the opportunity offers; and when it is not offered, it should be sought. Now, the fall and winter is the time when these Horticultural meetings are held; let every Nurseryman attend those nearest to him; let him get on the program and tell about the serious business men in the trade as represented by this Association. The Secretary is going to consult President Moon about the appointment of a Committee on Speakers who will make it their business to see that somebody talks at every Horticultural Society and Garden Club meeting. We must not leave it to those who know little about the nursery industry and less about our Association, to represent us always; we must represent ourselves. Consider yourself now appointed to attend your own local or State Horticultural Society meeting, to talk as a Nurseryman and as a member of your National Association.

M. D. FUND:—Again: While this work will be financed out of the revenue of the Association, those funds will not be available until after the June Convention. We depend until then upon the subscriptions made. Obligations have been assumed that must be met and we have only the promised money in sight. Some subscribers may feel that the Association's action has released them, but it has not. Those who have not remitted the balances called for by the Market Development Committee are requested to mail their checks. It is embarrassing to continue to ask for the money, even though the circumstances require it.

The Secretary wishes to thank, in this general way, the many members whose good-wishes and assurances of cooperation and assistance are very heartening; only the press of Association work prevents individual acknowledgments until later opportunity.

Yours truly,

John Watson, *Executive Secretary.*

Princeton, N. J., October 25, 1919.

White Pines.....	9	John B. Morey, Jr.....	78	Resumption of Foreign Shipments	22
W. H. Martin.....	290	Jonathan B. Morey, Jr.....	108	Rhododendron calendulaceum....	203
Is Our House in Order.....	318	Ludwig Heyn	277	Roads and Trees as Memorials...	251
Is Uncle Sam going into the Nur-		Theo. Inglefritz.....	201	Roadside Planting in New York..	113
sery Business to the Exclu-		Observations by the Optomist...	40	Rose, A Handsome Chinese.....	258
sion of all Others.....	199	Ohio Nurserymen's Meeting.....	253	Rose, Annual, The American.....	139
Imports—Mr. Dooley on the Pro-		One Hundred Dollars Reward....	197	Roses, Some Interesting.....	203
hibition of.....	19	One Hundredth Anniversary.....	255	Rose, The Propagation and Grow-	
Japanese Cherry Trees.....	171	One Point of View.....	228	ing of The.....	219
Job for Nurserymen, A.....	275	Oriental Plane A Failure, The....	169	Rules, for Importing Plants under	
Katsura Tree.....	21	Ornamental Trees and Shrubs of		Regulation No. 14.....	256
Keep up and Extend your Ac-		Merit For New England.....	110	Seeing without Observing.....	163
quaintance with Plants in		Ornamental Trees of Merit for		Shade Tree Memorials.....	15
your Nursery.....	218	New England.....	80	Size of Catalogues.....	130
Keyed List, The.....	166	Oswego Apple.....	136	Slogans, Suggested for the Market	
Labor Question, The.....	161	Pachysandra Terminalis.....	222	Development Movement.....	39
Latshaw, Address by Mr. M. L....	191	Pear Trees, The.....	141	Slogan, Wanted A.....	13
Leaf Spot on Sour Cherries, For.	231	Pecan Growers Association, Geor-		Sobarias	65
Letter from Eugene Howard.....	300	gia, Florida.....	140	Soft Wood Cuttings.....	247
Letter from J. Edward Moon....	296	Pecans, Investigations, With.....	233	Some Facts of Interest to Mem-	
Letter from P. Ouwerkerk.....	275	Penna. Nurserymen's Association,		bers of the American Associa-	
Letter from Theo. Foulk.....	250	Annual Meeting of the.....		tion of Nurserymen.....	249
Letter of Commendation from		Perfectly Simple.....	221	Some Trees get Hardier with Age	218
Ruth Day	317	Pernicious Publicity.....	163	Sophora Japonica.....	98
Let the Slogan be "Forward"....	159	Pertaining to Petaluma.....	11	Southern Nurserymen's Associa-	
Lime Association.....	250	Pertaining to the Plant Embargo.	49	tion	229
Landscape Gardeners, Trade		Philadelphus	300	Sowing Seeds by Aeroplane.....	315
Prices to.....	71	Pine, White	9	Speaking of Father.....	226
Mayhew, Letter from J. R.....	136	Plant Embargo, The.....	66	Speaking of Slogans.....	197
Make your Hotel Reservation		Plant Embargo, A French Nur-		Spring Business.....	19
Early	166	serymen's Opinion on the....	12	Scent	169
Making a Start in Business.....	21	Plant Embargo, Federal Horticul-		Stealing Plants.....	291
Market Development	13	tural Boards Side of the Plant		Story of Long Ago, A.....	167
Market Development	67	Embargo	68	Summer Planting and a Year	
Market Development, Campaign		Plant Exclusion Law, An Opinion		Around Income.....	298
Under Way	99	on the.....	50	Take your Help in Partnership	
Market Development, Taken over		Plant Fanciers.....	247	with You.....	172
by the National Association..	197	President's Address.....	187	Tarnished Plant Bug and its In-	
McHutchinson, A Little Daughter		Prices	276	jury to Nursery Stock, The... 202	
Born, James	136	Prices, A Suggestion for Stabiliz-		Tennessee, House Bill, No. 910... 138	
Metric System, The.....	247	ing	161	Tennessee State Nurseymen's As-	
Memorial Trees	10	Princeton, Nurseries.....	186	sociation	73
Memorial Trees	38	Prinsepia Sinensis.....	171	The Sec. on the Job.....	316
Memorial Trees	136	Problem of Stocks for American		Trade Prices to the Trade only.. 200	
Memorial Trees	66	Fruit Growers, The.....	43	Trade Prices to Landscape Gar-	
Million Coolies Needed in the U. S.	255	Promising Cherry Orchard, A....	42	deners	71
Mr. Dooley on the Prohibition of		Proposed, New Law for Michigan,		Trade Acceptances.....	48
Imports	19	A	168	Trained Fruit Trees.....	158
Mr. Rockwell on the Job.....	111	Protecting Hybrid Tea Roses....	316	Tree Conceals Body 57 Years.... 254	
National Association, The.....	27	Protest Against the Horticultural		Trees and Shrubs of Merit for	
New England Nurserymen's Asso-		Import Prohibition.....	46	New England, Ornamental.. 110	
ciation	25	Prunus Subhirtella.....	171	Trees as Memorials.....	22
New England Nurserymen's Asso-		Prunus Yedonsis.....	171	Tree Seed.....	277
ciation, Annual Convention of		Putting the Horse ahead of the		Tree Seeds, Preliminary Report.. 277	
the	41	Load	316	Trees, Native and Foreign.....	113
New York Nurserymen's Dinner.	73	Quarantine, No. 37.....	170	Two Useful Shrubs.....	231
New York State Nurserymen's		Amend Plant Quarantine to Ad-		U. S. D. of A., Can the United	
Association, Annual Dinner of		mit Flower Bulbs.....	106	States Grow its own Fruit	
the	78	Barbier & Co., Letter From....	136	Stock	98
Nitrate of Soda, Better than Cow		Illinois Nurserymen Endorse		U. S. D. of A., Easter Lilies, Work-	
Manure	139	Quarantine	73	ing for All-American.....	106
Notes from the Arnold Arboretum	141	Letter From Theo. Foulk.....	226	U. S. D. of A., Fruit Stocks, Can	
Notes from Arnold Arboretum,		Nurserymen's Legislative Com-		the United States Grow its	
Dwarf Conifers	23	mittee Meets Secretary Hous-		own	98
Notes from the Executive Secre-		ton	74	Unfolding Leaves.....	141
tary's Office	314	Objection to Quarantine.....	74	Use of Nails Forbidden to Fasten	
Nursery Business in Texas, Fig-		Protect American Crops, Entry		Burlap Wrapping of Bales,	
ures of	130	of Plants Restricted to.....	68	The	251
Nurserymen's National Service		Provision for, Entry of Plant		Varieties	248
Bureau	202	Novelties and Propagating		Vegetable Growers Association of	
Nurserymen's National Service		Stock, Explanation of.....	135	America	251
Bureau	249	Result of Meeting in Reference		Vegetable Growers Convention... 221	
Nurserymen's Obligation under		to Quarantine No. 37.....	131	Wanted, A Slogan.....	13
the Nursery Fraud Act.....	200	Situation, How to Meet, The... 274		War Orphans of France, Dying of	
Nurserymen's Opportunity in the		Steps Leading to the Quarantine		Malnutrition and Shock.... 229	
Reconstruction Period, The.. 194		Quarantine on Account of Black		Weeds	228
Nurserymen's Relation with his		Stem Rust.....	140	Well Planted Entrance, A.....	245
Customers	294	Quite a Contrast.....	46	West Virginia University.....	296
Nursery Stock Permitted from		Raffia	13	Which Way Will it Develop.... 248	
Contiguous Countries.....	246	Raffia	138	Whiting Nursery Company.....	73
Nurserymen Will Meet in Denni-		Red Cross Goes on Work of The.. 141		Why They Need You.....	254
son, September 24-25.....	257	Red Tape.....	22	Will, Some Nurseryman.....	71
Oak Park Nurseries.....	73	Replanting Fruit Trees in Devas-		Wooly Apple Aphis Experiments	
Obituary		tated France.....	275	in the Control of the Root	
A. K. Klingman	201	Resolution on Replacement of		Form of the.....	169
C. S. Harrison.....	108	Nur. Stock	320	Yeast is Beginning to Work, The	160

ABELIA GRANDIFLORA

Nice lot of field grown, well branched stock. Two sizes, 8 to 12 in., 12 to 18 in., 18 to 24 in. By the 100 or 1,000.

THOMASVILLE NURSERIES

THOMASVILLE - GA.

WANTED

Young nurseryman as partner to build up nursery business. Opportunity limited only by ability to push business. No capital required. Best references required.

HAROLD ZEISS

1004 Harris Trust Bldg. - Chicago, Ill.

We offer for fall shipment, Catalpa, Willow, Lombardy and Carolina Poplar, Oriental Plane, Silver Leaf Maple 8 to 14 ft. Spirea, Deutzia, Weigelia, Althea, Privets, Forsythia, Lilac, Crape Myrtle, Corral Berry, Spice Bush, Magnolia 2 to 5 ft.

CURETON NURSERIES, Austell, Ga.**WANTED**

A first-class salesman who is capable of taking care of general nursery correspondence. State experience, age and salary desired.

FANCHER CREEK NURSERIES,
Fresno, Calif.

St. Regis Raspberry Canes

in quantity, Fall or Spring Delivery

A. J. Humphreys. Mt. Sterling, Ky.

PRINTING

Catalogues
Stationery
Business Forms



The Robinson
Publishing Co
Hatboro, Pa.

Specialists in Nursery Printing

Ask for Prices. We are the printers of this Magazine

AMERICAN FLORIST'S TRADE DIRECTORY

Price \$3.00, Postpaid

For Sale By

NATIONAL NURSERYMAN PUB. CO. Inc.,
HATBORO, - - - PA.

WANTED

WANTED—A middle aged man as nursery foreman, who understands budding of fruit and roses; can handle help and teams. We have a good opening for the right party. Please reply stating age, experience, salary expected, etc.

C. R. BURR & CO.,

Manchester - - Conn.

POSITION WANTED—By expert propagator of fruit, tree and shrub seedlings, grapes and lining out stock for the Northwest wholesale trade. Also can do high grade landscape work. Successfully combine practice with science. Want permanent position with going concern with an opportunity of eventually being taken into the business. Age 34, married. Steady, reliable and a hustler.

Seedling Expert. In care of National Nurseryman.

FOR SALE**FOR SALE**

Eighty Acres well improved rolling land, six room house, grafting shop, good barn, new silo, good well and windmill, five new individual hog houses, chicken house. Buildings all well painted a year ago this fall. About 200 rods of new woven wire fence on the place. This would be a very suitable place for stock raising in connection with a nursery as there is pasture land and improvements for both.

This nursery has been known as The Hawkeye Nursery which has been running until the last few years and was fixed up purposely for a nursery having many advantages in the way of landscape work and variety of trees in the yard and orchard that is matured.

Location is very good for a nursery as there is no nursery near, it is 12 miles southwest of Webster City, 6 miles north of Stratford, 4 miles southeast of Homer and 7½ miles northwest of Stanhope. Asking \$215.00 per acre.

For further information write

R. A. KAUFFMAN

OAKDALE - - IOWA

ESTABLISHED 1893

THE NATIONAL NURSERYMAN

INCORPORATED 1902

The only Trade Journal devoted exclusively to the interests of growers and dealers in nursery stock.

Edited by a practical nurseryman, Ernest Hemming, Flourtown, Pennsylvania, to whom all correspondence pertaining to the Editorial Department, should be addressed.

Nurserymen cannot afford to be without a trade paper. The advertising pages, patronized by all leading nurserymen throughout the world, will save many dollars to the subscriber. These pages are a record of the stock offered for sale.

SUBSCRIPTION PRICE \$1.50 per year in advance. FOREIGN SUBSCRIPTIONS \$2.00 per year in advance.

Advertising Rates on Application

THE NATIONAL NURSERYMAN PUBLISHING COMPANY Incorporated

Subscribers to "Nurserymen's Fund for Market Development."

Hatboro, Penna.

When writing to Advertisers please mention the National Nurseryman.

INDEX TO ADVERTISERS

- Allen, V. R., 6, 53, 85, 117, 144, 172, 205, 215, 259, 280, 305, 329
 Allen Co., The W. F., 1, 29, 57, 89, 121, 149, 177, 209, 237, 265, 285, 309
 American Ass'n. of Nurserymen 279, 301, 325
 American Steel Band Co., 27, 55, 87, 119, 147, 175, 207, 235, 263, 283, 307, 331
 Audubon Nursery, 6, 53, 85, 117, 144, 155, 183, 215, 241, 269, 299, 323
 B. M. H. care Nat'l. Nurseryman, 278
 Barnes Bros. Nur. Co., 30, 58, 90
 Bay State Nurseries, 26, 54, 86, 118, 146, 174, 206, 234, 262, 282, 306, 330
 Beauty Rose Co., 241
 Beeman Garden Tractor Co., 183, 215, 241, 269, 299
 Berry & Sons, P. D., 213, 242, 270, 297
 Bertolf Bros., 205
 Betscher, C., 207, 235, 263, 283, 307, 331
 Bobbink & Atkins, 26, 54, 86, 118, 146, 174, 206, 234, 262, 282, 306, 330
 Bohlender & Sons, Peter, 303, 331
 Box 60 care Nat'l. Nurseryman, 50
 Box 77 care Nat'l. Nurseryman, 204, 233, 259
 Box 548 care Nat'l. Nurseryman, 172, 204, 233
 Bragg & Co., L. G., 156, 184, 216, 244, 272, 293
 Breitmeyer Landscape & Nur. Co., 81
 Bunting's Nurseries, 155, 183, 213, 259, 280, 305, 329
 Burr & Co., C. R., 1, 29, 57, 89, 121, 149, 177, 209, 237, 265, 285, 309, 327
 California Nur. Co., Inc., 295
 Calls Nurseries, 52, 85, 117
 Campbell-Johnson Printing Co., 155, 183
 Champion & Son, H. H., 82, 118, 125, 156, 184, 216, 244, 269, 299, 323
 Chase Co., The Benjamin, 27, 55, 87, 119, 147, 175, 207, 235, 263, 283, 305, 329
 Chattanooga Nurseries, 258, 269
 Coe, Converse & Edwards Co., 259, 280, 299, 323
 Cole, W. B., 52, 143, 150, 178, 260, 272, 293, 319
 Conigisky, B. F., 6, 53, 183
 Cottage Gardens Nurs., 81
 Cureton Nurseries, 25, 52, 53, 84, 85, 259, 278, 305, 327
 Denney Tag Co., 5, 34, 62, 93, 125, 155, 183, 215, 241, 272, 293, 319
 Detriche Sr., Charles, 26, 54, 86
 Diamond Agency, 299, 323
 Drumm Seed & Floral Co., 259, 277
 E. F. G. care Nat'l. Nurseryman, 172, 204, 233
 Elizabeth Nur. Co., 278
 Elliott Nur. Co., 204
 Elm City Nur. Co., 63, 93, 125, 155, 183, 215, 241, 269, 281, 299, 323, 329
 Elmer Bros. Nur., 82
 Evansville Nurseries, 6, 53
 Evergreen Nursery Co., 85, 117
 F. & F. Nurseries, 215, 241, 269, 299, 323
 Fancher Creek Nurs., 278, 303, 305, 327
 Florists' Exchange, 27, 55, 87, 119, 146, 174, 206, 234, 262, 282, 306, 330
 Framingham Nurseries, 27, 55, 87, 119, 147, 175, 207, 235, 263, 283, 307, 331
 Franklin Davis Nurs., Inc., 84, 94, 283, 307
 Fresno Nursery Co., 278
 Fromow & Sons, W., 26, 54, 86, 118, 146, 174
 Gardeners' Chronicle, 26, 54, 86, 118, 146, 174, 206, 234, 262, 282, 306, 330
 Gardner Nur. Co., 6, 53, 85, 117, 144, 155, 205, 233, 259, 280, 305, 329
 Graves, E. H., 50
 Gray's Nursery, 82
 Green's Nursery Co., 63
 Griffith, R. B., 52, 85
 Grootendorst & Sons, F. J., 2, 94, 126, 154
 Gurney Seed & Nur. Co., 6, 53, 85, 117, 144
 Harris, S. G., 204, 233, 241
 Harrison's Nurs., 28, 56, 88, 120, 148, 176, 208, 236, 264, 284, 308, 332
 Hill Nur. Co., Inc., The D., 8, 36, 58, 90, 122, 154, 181, 213, 242, 270, 297, 321
 Hillemeier, H. F., 5, 34, 62, 93, 126, 307
 Hobbs & Sons, C. M., 4, 32, 60, 92, 124, 152, 180, 212, 240, 268, 288, 312
 Homes Nurs., Inc., 260
 Hood & Co., W. T., 25, 26, 50, 54, 86, 118, 146, 174, 206, 234, 262, 282, 306, 330
 Hoopes Bro. & Thomas Co., 7, 35, 82, 210, 238, 266
 Horticultural Advertiser, 26, 54, 86, 118, 146, 174, 206, 234, 262, 282, 306, 330
 Horticulture Pub. Co., 7, 82, 117, 144, 172, 206, 234, 262, 282, 306, 330
 Howard Rose Co., 155, 205, 215
 Hubbard Co., T. S., 35, 84, 115, 144, 154, 260, 280, 305, 331
 Humphrey, A. J., 327
 Huntsville Wholesale Nurs., 4, 32, 60, 92, 124, 152, 180, 212, 240, 268, 288, 312
 Ilgenfritz' Sons, I. E., 1, 29, 57, 89, 121, 149, 177, 209, 237, 265, 285, 309
 Interstate Bag Co., 63
 Jackson & Perkins Co., 2, 26, 30, 54, 58, 86, 90, 122, 150, 178, 210, 238, 266, 286, 310
 Jankowsky, S., 81
 Kauffman, R. A., 278, 303, 327
 Keene Forestry Ass'n., 50, 84, 117
 Kelsey, Harlan P., 125
 Kinsman, Inc., A. M., 126
 Lane, Thomas J., 6, 53, 85, 117, 144, 172, 205, 215, 259, 280, 305, 329
 Leddon, L. R., 115
 Leedle Floral Co., 25, 53, 85
 McHutchison & Co., 7, 35, 63, 93, 96, 122, 125, 205, 210, 238, 266, 269, 286, 310
 Meehan Co., Thomas B., 7, 27, 35, 52, 55, 63, 84, 87, 93, 115, 119, 125, 147, 156, 175, 184, 207, 216, 235, 244, 263, 269, 283, 299, 307, 323, 331
 Milton Nursery Co., 6, 53
 Mitchell & Son, W. T., 52, 81
 Mount Arbor Nurs., 1, 29, 57, 89, 121, 149, 177, 209, 237, 265, 285, 309
 Nitrate Agencies Co., 319
 North-Eastern Forestry Co., 5, 34, 62, 94, 128, 150, 178, 210, 238, 266, 286, 310
 Nursery Box 1263, 204
 Nurserymen's Ass'n. of Holland, 51
 Nurserymen's Nat'l. Service Bureau, 83, 116, 145, 153
 Oak Lawn Nursery, 6, 53, 85, 258, 278, 305, 329
 O'Hara, Patrick, 233, 259
 Orongo Flower Gardens, 117, 260, 280
 Ouwerkerk, P., 6
 Parker Bros. Nur. Co., 299, 323
 Peck, Stow & Wilcox Co., 33, 61, 95, 127, 243, 271
 Peters, Chas. M., 5, 34, 62, 96, 126, 154, 181, 213, 242, 270, 297, 321
 Peterson Nursery, 117, 181
 Portland Wholesale Nur. Co., 26, 54, 86, 118, 146, 174, 206, 234, 262, 282, 306, 330
 Princeton Nurs., 2, 30, 64, 94, 128, 156, 184, 216, 244, 272, 293, 319
 Rakestraw-Pyle Co., 93, 125, 242, 270, 297, 323
 Reed, W. C., 8, 36, 64, 96, 126, 154, 181, 213, 242, 270, 297, 321
 Rhodes Mfg. Co., 7, 35, 84, 286, 310
 Robinson Pub. Co., 6, 53, 85, 117, 144, 155, 183, 215, 259, 280, 305, 327
 Roessler & Hasslacher Chem. Co., 5, 34, 62, 94, 126, 154, 181, 213, 242, 270, 297, 321
 Rosedale Nurs., 25
 Salesman care of Nat'l. Nurseryman, 204, 233, 259
 Saitama-Engel & Co., 258, 269
 Sarahan & Rosenthal, 8, 36, 64
 Schifferli, F. E., 6, 53, 85, 117, 144, 172, 205, 215
 Scraff & Sons, W. N., 26, 54, 86, 118, 146, 174, 206, 234, 262, 282, 306, 330
 Seedling Expert, care Nat'l. Nurseryman, 327
 Shenandoah Nurs., 84
 Sherman Nur. Co., 4, 32, 60, 92, 124, 152, 180, 212, 240, 268, 288, 312
 Skinner & Co., J. H., 8, 36, 63, 90, 122, 150, 178
 Smith Co., W. T., 4, 32, 60, 92, 124, 152, 180, 212, 240, 268, 288, 312
 Southern Nur. Co., 278
 Stony Hill Nurs., 115
 Storrs & Harrison Co., 3, 31, 59, 91, 123, 151, 179, 211, 239, 267, 287, 311
 Swan River Nur., 8, 36, 64, 96, 128, 156, 184, 216, 244
 Taylor & Sons, L. R., 25, 30, 58
 Templin-Crockett-Bradley Co., 50
 Thomasville Nurseries, 259, 280, 305, 327
 Toole & Sons, William, 6, 53, 85, 117, 144, 155, 205, 233, 259, 280, 305
 Townsend & Son, E. W., 321
 Turbat & Co., E., 260
 Undritz, Reinhold, 260
 Van Lindley Nur. Co., J., 27, 55, 87, 119, 147, 175, 207, 235
 Vaughan's Seed Store, 172, 261
 Virginia Nursery Co., 278
 Wagner Park Nur. Co., 50, 81
 Webster Parish Nurs., 258
 West, T. B., 26, 54, 86, 118, 146, 174, 206, 234, 262, 282, 306, 330
 Westbury Nur. Co., 35
 Westminster Nur., 6, 35, 63, 93, 126, 154, 181, 213, 242, 270, 297, 321
 Willadean Nurs., 5, 34, 62, 94, 126, 154, 181, 213, 242, 270, 297, 321
 Zeiss, Harold, 303, 327

Getting Up a Stock of Ibolium Wood in a Hurry

The accompanying illustration showing the end of a block of IBOLIUM Privet plants will be suggestive to the practical Nurseryman as one of the means of getting up quickly stock of propagating wood. The exact luxuriance of this growth can be determined by taking note of the stake appearing in the illustration which is just three feet tall, the butt resting on the ground. These plants showing this vigorous growth are but one year old buds on two year Amoor River Privet stocks.



When we decided to introduce IBOLIUM Privet to the trade a year ago we had but the original plant, some forty (40) three year olds, and a few hundred one years. The advisability of holding it for several years before putting it out was before us. We finally decided to offer a part of what stock we had to the trade so those

generally who chose to go in could have about the same equal start. Just how to get up an ample stock of plants from which to take cuttings was a problem for us and this illustration shows how quickly and satisfactorily it was solved. By putting some two thousand buds in two year Amoor River Privet stock last autumn which produced an almost perfect stand, we were able to get the growth this illustration shows, within a single season. During the summer this block of buds has produced for us a large quantity of summer cuttings and is now maturing a large supply of hardwoods which will be set direct in the Nursery another spring the same as is often done with California Privet. This new hardy hybrid privet, IBOLIUM, proves to propagate with the same facility which has made California Privet so easy to get up both from hard and soft wood cuttings.

Now that IBOLIUM Privet has been offered to the trade and so many of the leading Nurserymen are eager to get up a stock of it as soon as possible so that it can be quickly offered, this illustration and these notes we believe will be of suggestive help.

The Elm City Nursery Co., Woodmont Nurseries, Inc., New Haven, Connecticut

STRAWBERRY PLANTS

We offer for Winter and Spring delivery 1919-1920 upwards of FOUR MILLION strawberry plants of the following varieties.

Parsons Beauty Klondike Gandy

The most extensively planted varieties for commercial purposes.

We are located in the largest STRAWBERRY CENTER in the WORLD and have the soil and climate to produce the best strawberry plants. Only limited stock of other varieties unsold.

Would be pleased to quote you.

Bunting's Nurseries, G. E. BUNTING & SONS, Props.
Selbyville—Delaware

Subscribers to "Nurserymen's Fund for Market Development."

EVERBEARING STRAWBERRY PLANTS

If you need Everbearing strawberry plants to fill spring orders or if you wish to increase your planting in nurseries, we can supply you with genuine PROGRESSIVE Everbearing plants, guaranteed to be TRUE TO NAME and handled so as to reach you in best of growing condition. Write for prices.

We have been growing and breeding the Everbearing strawberries for the past eight years and have many new varieties growing in our experimental grounds that are not yet for sale. We invite a personal visit to our grounds during fruiting season, preferably during August or September. The latch string is always out.

THE GARDNER NURSERY CO., Drawer 103, Osage, Iowa.

Seeds For Nurserymen

Apple, French, Japan and Kieffer Pear, Myrobalan Plum and Quince Seeds. Also Tree, Shrub and Evergreen Seeds in a large assortment. My Catalogue contains complete list with Prices. Send for a copy.

THOMAS J. LANE
SEEDSMAN

DRESHER,

Penna., U. S. A.

500,000 California Privet
—Hardwood Cuttings—
1,000,000 Cal. Privet
250,000 Privet Amurense
1,000,000 Shade Trees
1,000,000 Hardy Shrubs
100,000 Roses

Write for price list.

OAK LAWN NURSERY,
Huntsville, Ala.

∴ STRAWBERRY PLANTS ∴

Summer and Fall bearing varieties, shipped to you or direct to your customer under your tag.

Plants and service that pleases both you and your trade.

Let us quote you

V. R. ALLEN,

59 Lane Avenue

Seaford, Del.

LABELS FOR NURSERYMEN

THE BENJAMIN CHASE CO.

DERRY, N. H.

When writing to Advertisers please mention the National Nurseryman.

Bobbink & Atkins

Nurserymen and Florists

Subscribers to "Nurserymen's Fund for Market Development."

RUTHERFORD, NEW JERSEY

Palms and Greenhouse Stock, Roses, Evergreens, Trees and Perennials.

Send us your want list.

Inspect our stock.

The Gardeners' Chronicle

(Established 1841)

The BEST and OLDEST horticultural paper in England. Price 4d per week.

Send for free copy and subscription rates to:—

The Publishers, 41 Wellington St.
W. C. 2, London, England



EVERY SATURDAY

Advertising Space, \$1.25 per Inch. Subscription, \$1.50 per Annum

Under this title we publish the most reliable, progressive and up-to-date trade paper in the country, with departments covering the Nursery, Florist, Seed Trade and Allied Industries. With a paid up subscription and distribution list of 10,000 copies, nearly every copy of which is to men in business for themselves the worth of our columns will be readily appreciated. The editor of our Nursery Department is and has been for years, JOSEPH MEEHAN, of Philadelphia.

For sample copy, discounts, etc., address
The Florists' Exchange, P. O. Box 100, Times Square Sta.

ALL "AMERICAN NURSERYMEN"

Wishing to do business with Europe should send for the
"Horticultural Advertiser"

This is The British Trade Paper being read weekly by all Horticultural traders. It is also taken by over 1000 of the best Continental houses. Annual subscriptions to cover cost of postage, \$1.00. Money orders payable at Lowdham, Notts. As the H. A. is a purely trade medium applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trades. Address

Editors of the "H. A." LOWDHAM, NOTTS, ENGLAND

HORTICULTURE

A Magazine of Trade News and Cultural Information for the NURSERYMAN, FLORIST, SEEDSMAN and GARDENER. A reliable exponent of advanced Trade and Progressive Horticulture.

Published Weekly

SUBSCRIPTION \$1.00 PER YEAR

Horticulture Publishing Co.
147 Summer St. Boston, Mass.

SCARFF'S NURSERY

Headquarters for

Small Fruit Plants

1200 Acres "At it 25 Years"

Strawberries
Raspberries
Blackberries
Dewberries
Berberry

Currants
Gooseberries
Grape Vines
Privet
Spirea

Rhubarb
Asparagus
Horseradish
Hardwood Cuttings
Butterfly Bush

100,000 transplanted Raspberry, Blackberry and Dewberry plants for retail trade. See wholesale list before placing your order.

W. N. SCARFF & SONS

NEW CARLISLE

OHIO

A Fine Stock of

Norway Maple, Silver Maple, European Sycamore

and other Ornamental Trees in All Sizes

A beautiful lot of CUT LEAF BIRCH 8-10 ft. and 10-12 ft.
Hardy Shrubs of all kinds

Also a limited supply of Fruit Trees and Small Fruit Plants.

T. B. WEST

Maple Bend Nursery

Perry, Ohio

W. T. HOOD & CO. OLD DOMINION NURSERIES

RICHMOND

VIRGINIA

SURPLUS FOR SPRING 1920

Shade trees, extra fine, straight bodies and extra rooted; one to two and one-half inches, Norway, Silver, and Sugar Maple, Pin and Red Oak; California Privet, 2, 3, and 4 years; Sugar Maple Seedling, six inches to ten feet.

Write for Prices

TO THE TRADE ONLY

We offer a general assortment of Nursery stock, and Nursery supplies, including—

A few thousand Vrooman

FRANQUETTE AND MAYETTE WALNUTS,
both grafted, and seedlings from grafted trees,
and

ITALIAN OR SPANISH CHESTNUT

Portland Wholesale Nursery Co.

122½ GRAND AVENUE

PORTLAND, OREGON

TREES

Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

The Bay State Nurseries

North Abington
Mass.

SHRUBS

This New England soil and climate produce fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists let us est.

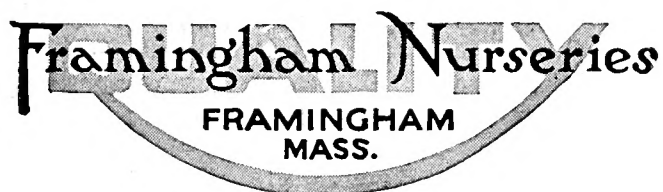
FRAMINGHAM QUALITY NURSERY STOCK

for

YOUR RETAIL TRADE

We grow the grade of evergreens, trees, shrubs and vines that will bring repeat orders from your customers.

Now is the time to prepare for Spring business. Make us a visit. Inspect our stock and reserve what you require for Spring shipment.



NURSERY BANDS

Manufacturers of

STEEL BOX STRAPPING

FOR

NURSERY PURPOSES

SPECIAL OFFER—We offer all or any part of an accumulation of long Nursery Bands one inch in width and sixty inches to one hundred and twenty inches in length, at a reduction of twenty dollars a ton. This offer holds good until stock is disposed of.

WRITE US

COVERING YOUR WANTS IN STEEL BANDS

American Steel Band Co.,

888 Progress Street,

ALLEGHENY, PA.

Boston Ivy **Clematis Paniculata**
Shrubs **Raspberries**
Blackberries **Evergreens**
Ornamental Trees **Perennials**
California Privet Hedge
Japan Berberry

Prices on request

PETER BOHLENDER & SONS

Tippecanoe City, Ohio

ATTENTION!

We are now offering our usual brands of

RAFFIA

Best Quality—

—Lowest Prices

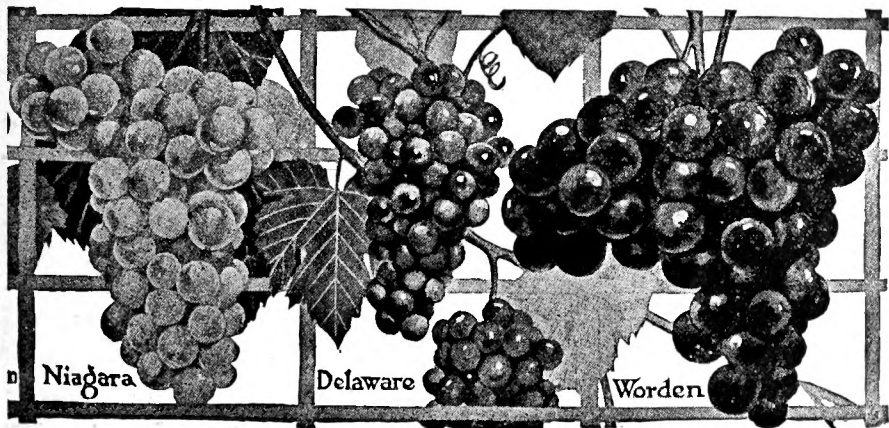
Price List mailed on request.

Thomas B. Meehan Co.

DIRECT IMPORTERS

Dresher - - Penna.

Subscribers to "Nurserymen's Fund for Market Development."



T. S. HUBBARD CO.

Fredonia, N. Y.

Growers of Grape Vines and Small Fruit Plants
For Garden and Vineyard Planting

Established 1866

Send for Catalogue

Peonies A SPECIALTY

The cream of 1200 sorts

Some extra new ones

THE WORLD'S BEST!

Eighteen Acres

Write for our List

Cannas, Dahlias and Gladioli

C. BETSCHER, Dover, O., U. S. A.

When writing to Advertisers please mention the National Nurseryman.

Harrisons' FLOWERING SHRUBS

BUTTERFLY BUSH
200 4 to 5 ft.

CORAL BERRY
500 3 to 4 ft.

DOGWOOD, RED TWIG.
100 3 to 4 ft.

DEUTZIA, CRENATA.
100 4 to 5 ft.

**DEUTZIA,
PRIDE OF ROCHESTER**
1000 4 to 5 ft.

**DEUTZIA,
DOUBLE WHITE**
500 4 to 5 ft.

ELDER, FERN LEAF
200 5 to 6 ft.
200 6 to 7 ft.

GOLDEN BELL, Dark Green
500 4 to 5 ft.

INDIGO, FALSE.
200 5 to 6 ft.

MOCK ORANGE, GOLDEN.
(Dwarf).
200 2 to 3 ft.

MOCK ORANGE
Gordonianus.
250 4 to 5 ft.

MOCK ORANGE
COMMON
200 4 to 5 ft.

**ROSE OF SHARON,
ASSORTED COLORS**
200 4 to 5 ft.

SIBERIAN PEA SHRUB
100 4 to 5 ft.

SCOTCH BROOM
200 3 to 4 ft.

SWEET SCENTED SHRUB
200 3 to 4 ft.

SPIREA, BLUE
200 3 to 4 ft.

SPIREA, VAN HOUTTII.
500 4 to 5 ft.

SPIREA, Anthony Waterer
300 2 to 3 ft.

WEIGELA, ROSEA.
500 4 to 5 ft.

WEIGELA, AMABILIS ALBA
200 4 to 5 ft.

PRIVET
CALIFORNIA
5,000 18 to 24 in.
50,000 2 to 3 ft.
50,000 3 to 4 ft.
50,000 4 to 5 ft.

CALIFORNIA (Specimen).
1,000 5 to 6 ft. high 3 ft. broad

BOXWOOD
500 18 inch
500 24 inch
500 30 inch
100 36 inch



California Privet Block

SHADE TREES

BEECH, PURPLE
(Fagus Sylvatica).

250 4 to 5 ft.
100 5 to 6 ft.
100 6 to 7 ft.

CATALPA, SPECIOSA.

200 6 to 8 ft.
200 8 to 10 ft.

ELM, AMERICAN

300 5 to 6 ft.
300 8 to 10 ft.

LINDEN, AMERICAN.

200 6 to 8 ft.
200 8 to 10 ft.
100 10 to 12 ft.

LOCUST, HONEY.

100 7 to 8 ft.
300 8 to 10 ft.
200 10 to 12 ft.
250 12 to 14 ft.

LOCUST, BLACK

50 12 to 14 ft., 1 3/4 in.
50 14 to 16 ft., 2 in.

MAPLE, ASH LEAF
(Box Elder)

100 7 to 8 ft., 1 1/4 in.
100 8 to 10 ft., 1 1/2 in.
100 10 to 12 ft., 1 3/4 in.
100 12 to 14 ft., 2 in.

MAPLE, SUGAR.

200 7 to 8 ft., 1 in.
500 8 to 10 ft., 1 to 1 1/2 in.
500 10 to 12 ft., 1 1/2 to 1 3/4 in.
500 12 to 14 ft., 1 3/4 to 2 in.
500 14 to 16 ft., 2 to 2 1/2 in.

MAPLE, NORWAY

10,000 8 to 10 ft., 1 1/4 to 1 1/2 in.
10,000 10 to 12 ft., 1 1/2 to 1 3/4 in.
10,000 12 to 14 ft., 1 3/4 to 2 in.
10,000 14 to 16 ft., 2 to 2 1/2 in.
10,000 2 1/2 to 3 in.
5,000 3 to 3 1/2 in.
2,000 3 1/2 to 4 in.
400 4 in.

MAPLE, SILVER

500 8 to 10 ft., 1 to 1 1/2 in.
900 10 to 12 ft., 1 1/2 to 1 3/4 in.
800 12 to 14 ft., 1 3/4 to 2 in.
500 14 to 16 ft., 2 to 2 1/2 in.
100 16 to 18 ft., 2 1/2 to 3 in.

MAPLE, SCHWEDLER'S

50 10 to 12 ft., 1 1/2 in.
50 12 to 14 ft., 1 3/4 in.
100 14 to 16 ft., 2 to 2 1/2 in.

OAK, BLACK.

25 8 to 10 ft., 1 1/4 in.
25 10 to 12 ft., 1 1/2 in.
25 12 to 14 ft., 1 3/4 in.
25 14 to 16 ft., 2 to 2 1/2 in.

OAK, PIN.

500 4 to 5 ft.
500 5 to 6 ft.
500 6 to 7 ft.
500 7 to 8 ft.
200 8 to 10 ft.

OAK, BUR or MOSSY CUP.

25 8 to 10 ft., 1 1/4 in.
25 10 to 12 ft., 1 1/2 in.
25 12 to 14 ft., 1 3/4 in.

OAK, RED.

25 8 to 10 ft., 1 1/4 in.
50 10 to 12 ft., 1 1/2 in.
50 12 to 14 ft., 1 3/4 in.
50 14 to 15 ft., 2 in.
50 15 to 16 ft., 3 in.

PECAN (Seedlings).

100 4 to 5 ft.
150 5 to 6 ft.
300 6 to 8 ft.
200 8 to 10 ft.
50 10 to 12 ft.

PLANE, ORIENTAL.

5,000 6 to 7 ft.
5,000 7 to 8 ft.
5,000 8 to 10 ft., 1 1/4 in.
5,000 10 to 12 ft., 1 1/2 in.
5,000 12 to 14 ft., 1 3/4 in.
5,000 14 to 16 ft., 2 in.

POPLAR, CAROLINA

500 6 to 8 ft.
500 8 to 10 ft.

POPLAR, LOMBARDY

400 7 to 8 ft.
500 8 to 10 ft.
500 10 to 12 ft.

WALNUT, BLACK.

1,000 5 to 6 ft.
1,000 6 to 7 ft.
500 7 to 8 ft.
500 8 to 10 ft.
500 10 to 12 ft.
500 12 to 14 ft.

WILLOW, GOLDEN, BARK.

100 4 to 5 ft.
100 5 to 6 ft.
50 6 to 7 ft.

WILLOW, BABYLONIAN WEEPING.

100 6 to 8 ft.
100 8 to 10 ft.

WILLOW, CURL LEAF.

100 6 to 8 ft.
100 8 to 10 ft.



Spiraea Vanhouttei

Harrisons' Nurseries, Berlin, Maryland

